



Outline History
of the
Soviet Working Class
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Outline History of the Soviet Working Class

Russian text edited

by

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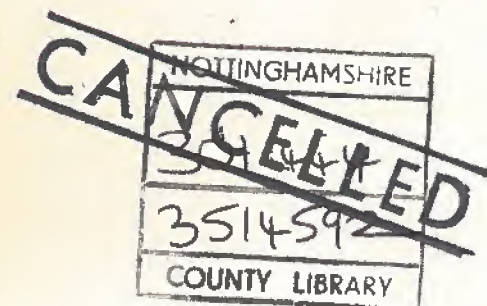


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КРАТКАЯ ИСТОРИЯ СОВЕТСКОГО
РАБОЧЕГО КЛАССА

(На английском языке)

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FOREWORD

Every social class has its biography, just as all individuals and mankind as a whole have their biographies.

For ages the relations between people were those of domination and subjection: the slaveowner and the slave, the landlord and the serf, the exploiter and the labourer—the omnipotence of the minority and the deprivation of the majority. Countless popular uprisings tried to change this order of things. Dreaming of happiness, people fantasised about utopias and made up tales about a golden age. But revolutions died down, ideas faded and new societies were ravaged by the old disease—the irreconcilability of class interests. Only the forms of oppression changed while its cornerstone, the private ownership of the means of production, remained intact and was pronounced as “sacred” and eternal.

But then the working class emerged on the historical scene and changed the course of human development, for the proletariat made it its goal to abolish private ownership of the means of production, the foundation of the former social system, and replace it by public ownership.

The USSR was the first country where this was achieved. Lenin predicted this when he wrote in 1894 that “the Russian WORKER, rising at the head of all the democratic elements, will overthrow absolutism and lead the RUSSIAN PROLETARIAT (side by side with the proletariat of ALL COUNTRIES) *along the straight road of open political*

struggle to THE VICTORIOUS COMMUNIST REVOLUTION".¹

In 1917, the shot fired from the cruiser *Aurora* heralded the beginning of the socialist revolution in Russia and with it the arrival of a new era. The centuries of oppression in Russia came to an end. A leap was accomplished "from the kingdom of necessity to the kingdom of freedom", and the Soviet working class put up the landmarks of modern history. This book is dedicated to the road it has covered.

Having overthrown the exploiters, the working class of Russia was the first in the world to put an end to hired slavery and ceased being a proletariat, that is, a class lacking its own means of production. At the time the enemies of Marxism clamoured that it was numerically small, illiterate and incapable of organising the economy and administering the state. . . . They were right. It was numerically small, it had yet to learn how to manage production, abolish illiteracy and foster its own intelligentsia. But they failed to see the most important thing: the proletariat of Russia was fully prepared to advance towards great accomplishments. It had the experience of three revolutions to draw on; its vanguard was a party of a new type headed by Lenin, it led the bulk of the peasants and had the support of class brothers in foreign countries. It accomplished the socialist revolution, survived the capitalist encirclement and covered a road which many nations are following today.

It was a road of magnificent victories and outstanding achievements, of grim trials and losses. But the working class stood firm and safeguarded all that it had won in battle and achieved by peaceful labour.

The USSR became an industrial power many years ago. As it transformed the country, the working class transformed itself. Now, families included, it comprises more than 50 per cent of the country's population. It has made tremendous headway in cultural and technological development and its public activity has risen to a very high level. The sphere of industrial production is expanding steadily and technological progress is gaining increasing momentum. Modern enterprises are being built, new machines are being

¹ V. I. Lenin, *Collected Works*, Vol. 1, p. 300.

made available to agriculture and spaceships are blazing trails in the limitless expanses of the universe. All these achievements are the direct outcome of the creative activity of the workers, their numerical growth and the mounting role of the working class in economic and political life. The building of communism is the historical task of the working class, that is why it is continuing to play the leading role in the state which belongs to the entire people. It is a class which from the very outset has been consistently and resolutely focussing its efforts on the establishment of a classless society.

Gradually there will be no boundaries not only between classes, but between states, nations and nationalities. Communism will become a reality. But even then the biography of the Soviet working class which paved the way to the establishment of this universal fraternity will constitute an unforgettable chapter in the history of mankind. It will be an account of the dictatorship of the proletariat, which was first established in one country, of the formation of the people's state and the establishment of fraternal relations with other socialist countries, and of the leading role of the working class in the building of a new life.

The history of mankind spans over millennia. The history of the Soviet working class is slightly over 50 years old. Yet it was these five decades that confirmed the principal regularities of social development and disclosed the social essence of the development and activity of the proletariat as the only class that is revolutionary to the end and which most fully expresses the interests of all the working people.

The contemporaries of the Soviet working class are proud of its biography. In this book the authors do not give an exhaustive account of its rise and development which has already been given in numerous monographs, hundreds of articles, collections of documents and memoirs. Neither have they written a textbook on the subject. This book, as the authors see it, is intended to show the principal stages in the development of the Soviet working class on the basis of the most important historical facts and figures; characteristic trends and profiles.

TOWARDS THE DICTATORSHIP OF THE PROLETARIAT

Genealogy of the Working Class

On May 27, 1886, the jurors of the Vladimir District Court replied "no" to the 101 charges brought against the workers who took part in the strike at the Morozov manufactory. On the following day the *Moskovskiy Uedomosty* newspaper wrote: "Yesterday a 101-salvo salute was fired in the holy city of Vladimir in honour of the labour problem which has appeared in Russia." For a long time the powers that be deliberately ignored the obvious fact that a new class, with its distinctive features, interests and objectives, has emerged in Russia. The strike of the 8,000 Morozov workers driven to despair by inhuman exploitation was a clear indication that the labour problem did exist in Russia. The Russian proletariat was alive and accumulating strength for their struggle against the oppression and for the building of a society where there would be no exploitation of man by man.

There were approximately 800,000 industrial workers in Russia prior to the abolition of serfdom. The development of capitalism engendered the growth of cities and the urban population. Summing up the results of the country's industrial development towards the end of the 19th century, Lenin noted: "The Russia of the wooden plough and the flail, of the water-mill and the hand-loom began rapidly to be transformed into the Russia of the iron plough and the threshing machine, of the steam-mill and the power-loom."¹

¹ V. I. Lenin, *Collected Works*, Vol. 3, p. 596.

At the beginning of the 20th century, over two million proletarians were employed in Russia's industry. All told there were approximately ten million hired workers in industry, agriculture, railways, building, forestry and earthwork.

The numerical growth of the proletariat was accompanied by qualitative changes in its composition. Due to the powerful concentration of production and the rise of large industrial enterprises, particularly at the end of the 19th century, almost a half of the industrial workers were massed at the biggest factories and mills. An increasing number of workers coming from the villages (and the village was the main source of the proletariat's numerical growth) gave up agriculture and linked up their lives with industrial production. By the end of the 19th century, about a half of the factory workers were "hereditary proletarians" whose fathers had been industrial workers. Historically it so happened that the proletariat of Russia had but an insignificant stratum of the so-called workers' aristocracy which depended on handouts from the bourgeoisie and therefore supported it. This fact made the working class of Russia more revolutionary, less susceptible to the influence of bourgeois ideology and absolutely irreconcilable towards its class enemies. The proletariat's leading role in production relations created the objective material conditions enabling it to become the vigorous leader of the liberation movement.

When the February Revolution took place in 1917, Russia had a fairly large army of proletarians. Of course, compared with Russia's enormous rural population, it constituted the minority accounting as it did for slightly more than ten per cent of the entire population. But the historical experience acquired in the course of several decades showed that the strength of the proletariat and its impact on all aspects of the economic and socio-political activity were far greater than the proportion it represented of the total population.¹ Owing to its social position the proletariat expressed the hopes, aspirations and interests of the working masses.

And, indeed, the proletariat announced its arrival on the historical scene by joining the liberation movement. Conso-

¹ V. I. Lenin, *Collected Works*, Vol. 30, p. 274.

lidating its ranks and developing its class-consciousness, the proletariat progressed from spontaneous revolts and economic strikes, the first manifestations of class struggle, to its highest forms. In the latter half of the 1890s, the liberation movement entered a new stage when the proletariat launched a struggle not for wresting individual concessions from the bourgeoisie and for improving its conditions of work within the framework of the existing exploiter system, but for overthrowing tsarism and then of capitalism.

The new epoch, the new stage of the liberation movement is directly connected with Lenin. In 1895, he and his associates in Petersburg founded the League of Struggle for the Emancipation of the Working Class which for the first time in Russia linked the ideas of scientific socialism with the mass spontaneous working-class movement.

At the turn of the century, the centre of the world revolutionary movement shifted from Western Europe to Russia. This was a natural development. By then the advanced European countries had already passed the stage of bourgeois-democratic revolutions and had not yet reached the stage of socialist revolutions. Russia, on her part, was on the threshold of a great popular revolution which was to put an end to tsarism and the survivals of serfdom. The revolution matured in the imperialist epoch and, therefore, it could not have been a simple repetition of what had already taken place in the West. Its principal distinctive feature was that the people's struggle for freedom was headed by the proletariat whose class objectives went a long way beyond the limits of a bourgeois-democratic revolution.

Lenin wrote in 1902: "History has now confronted us with an immediate task which is the *most revolutionary* of all the *immediate* tasks confronting the proletariat of any country. The fulfilment of this task, the destruction of the most powerful bulwark, not only of European, but (it may now be said) of Asiatic reaction, would make the Russian proletariat the vanguard of the international revolutionary proletariat."¹

In these conditions the creation of a militant proletarian party capable of leading the working class and its allies against tsarism and then capitalism was regarded as the most

¹ V. I. Lenin, *Collected Works*, Vol. 5, p. 373.

urgent and crucial task. Bolshevism became a trend of political thought and a political party of a new type in 1903 at the Second Congress of the RSDLP.¹ The working class acquired a tested leader and guide who illuminated the path of the coming struggle and future victories with the bright light of Marxism-Leninism.

Overthrow of Tsarism.
Peaceful Period of the
Development of the
Revolution

In February 1917, the people's masses led by the proletariat demonstrated their ability to fight and win and to conduct creative revolutionary activity. The proletariat's immediate task, the overthrow of tsarism, was accomplished.

Tsarism, which had ruled Russia for centuries, crumbled in a few days. Russia's progressives, the Decembrists and Alexander Herzen, revolutionary democrats and the heroes of the Narodnaya Volya (People's Will) organisation, relentlessly fought to liberate the people from tsarist oppression. But it was only with the appearance on the historical scene of the proletariat headed by the Bolshevik Party that the masses acquired a leader capable of guiding them to victory.

On February 24 and 25, when the revolution in Petrograd was still gaining momentum, the workers at some factories in Vyborg District and other proletarian districts of the city began electing deputies to the Soviet of Workers' Deputies. They did this consciously, at their own initiative, recalling the experience of 1905 when the Soviets led the proletariat in its struggle for emancipation and became the embryos of administrative bodies, proving themselves to be the best form of a mass non-Party proletarian organisation.

According to incomplete figures a total of 600 Soviets of Workers', Soldiers', Sailors' and Peasants' Deputies sprang up in the country in March; 242 Soviets of Workers' Deputies and 116 Soviets of Soldiers' Deputies were elected in 394 cities and inhabited localities, and combined Soviets of Workers' and Soldiers' Deputies appeared in 91 cities and

¹ In 1918, the Russian Social-Democratic Labour Party (RSDLP) was renamed the Russian Communist Party of Bolsheviks RCP(B); since 1952, it is called the Communist Party of the Soviet Union (CPSU).

inhabited localities. The merger of the Soviets continued. Assessing the developments of 1905 Lenin wrote that "the Soviet of Workers' Deputies should be regarded as the embryo of a *provisional revolutionary government*",¹ and the events of February and March 1917 led to the discovery of the Soviets as the state form of the dictatorship of the proletariat and to proclaiming the slogan "All Power to the Soviets".

Assessing this historical step of the proletarian masses, Lenin said in 1918 that the Soviet power "was born at one stroke; it was born so easily because in February 1917 the masses had created the Soviets even before any party had managed to proclaim this slogan. It was the great creative spirit of the people, which had passed through the bitter experience of 1905 and had been made wise by it, that gave rise to this form of proletarian power."²

Everywhere it were the proletarians who initiated the creation of the Soviets and everywhere it were the industrial workers who made up their core and were their main creative force.

Seven hundred deputies were elected to the Moscow Soviet of Workers' Deputies and judging by its composition it was a workers' Soviet in the full sense of the word. Of the total number of deputies 536 were professional workers and another 30 were tramcar drivers, firemen, chauffeurs, telephone operators, senior workers. That meant that the workers had a majority of 566 mandates as against 134 deputies representing other sections of the working population. The majority of deputies represented large and medium enterprises. Metalworkers, the advanced contingent of the proletariat, comprised the biggest group. They numbered 278. Textile workers (82 deputies) made up the second largest group.

It was a young Soviet with only seven deputies being over 50 years of age. The overwhelming majority of the deputies (677) were men, which testified to the rather slow rate at which women workers were being drawn into public activity. Since Moscow had a predominantly Russian popu-

¹ V. I. Lenin, *Collected Works*, Vol. 10, p. 21.

² *Ibid.*, Vol. 27, p. 90.

lation most of the deputies were Russian (602). Yet, the Soviet was international in composition for its deputies were people of 13 nationalities. Only one deputy was completely illiterate, and 600 had a primary schooling. Nevertheless, this was the educational level of the "average" proletarian of those years. Having acquired the rudiments of grammar he thirsted for knowledge and culture and became aware of his class interests and, despite possible vacillations engendered by diverse circumstances, was prepared to accept Bolshevik ideas and to fight for their realisation.

Only 54 deputies had no party affiliations. Representatives of 16 parties and groups were elected to the Soviet, ranging from the Bolsheviks who numbered 205 and made up the largest group, to anarchists-individualists (only one deputy). Over 500 deputies were members of trade unions and over a third were members of various co-operative organisations. These figures testified to the rapid growth of political activity among the masses, although by no means all the workers were able immediately to discard their petty-bourgeois illusions and prejudices. A hundred and thirty-seven deputies joined political parties in 1905; 213 deputies had been charged with political offences prior to the Revolution; 209 had served prison terms; 86 had been exiled; two had served at hard labour and 17 had been living in emigration.

Such was the composition of the Moscow Soviet of Workers' Deputies whose role and significance, just as that of the Petrograd Soviet, transcended the city's limits and whose voice was heard throughout the country.

It seemed that nothing could prevent the Soviets from gaining full authority in the country, for they were backed by the entire people and supported by the revolutionary soldiers. The Soviets had enormous prestige and the trust of millions of people.

Yet these Soviets, which had been created by workers and soldiers and at first exercised genuine power and enjoyed undivided authority with the masses, voluntarily surrendered their power won in the flames of the revolution to the capitalists, the most inveterate enemies of the people. This did not happen accidentally.

Within a very short space of time millions of oppressed and unfortunate people awoke to political activity. The scope of the historical activity of the popular masses increased immeasurably during the revolution. Millions of people said "no" to tsarism. But they could not immediately say what power exactly should replace the rule of the landowners and capitalists. For a time they were unable to grasp the significance of what had taken place and to cast a sober look into the future. The awakening to public activity of a huge mass of people in a country such as Russia, where the bulk of the population were peasants, both labourers and petty owners, made it especially susceptible to petty-bourgeois illusions concerning the country's future.

This was the principal reason for the appearance of dual power in Russia after the overthrow of tsarism. It was an unprecedented situation, incomparably more complicated than could have been theoretically imagined, when the power of the bourgeoisie in the person of the Provisional Government and the power of the proletariat in the person of the Soviets existed simultaneously. Broad masses of people naïvely gave credence to the false promises of the Socialist-Revolutionaries and the Mensheviks that under the "control" of the Soviets the Provisional Government would fulfil all their wishes: it would give the workers food, the peasants land and draw the long-suffering country out of the imperialist war.

The Bolshevik Party faced the formidable task of not only making the working people see the truth, but also of leading them along the shortest possible path to socialist revolution.

...Late in the evening of April 3, 1917 a train pulled in the Finlandsky Station in Petrograd. A shortish, stocky man of middle age with a clipped beard and a high forehead alighted from one of the carriages. It was Lenin who had returned to Russia after nine years of emigration.

The cable informing of Lenin's arrival was received in the city at about noon. It was Easter; factories were closed and there were no newspapers. The problem was how to inform the workers about Lenin's arrival and organise a welcome for him. The Bolsheviks of the Vyborg District went from house to house telling the workers that Lenin was

due to arrive and groups of workers with banners reading "Meet Comrade Lenin who is arriving today" came out into the streets.

On Vasilievsky Island the Bolsheviks posted handwritten leaflets indicating the time and the place where the workers were to assemble before setting out en masse to the railway station. Receiving the news about Lenin's arrival a meeting of the Bolsheviks of the Narva District hastily ended its work and its participants went out to inform the workers of the district. The revolutionary sailors of the Kronstadt naval base promised to send a guard of honour and a band on board an icebreaker since ice barred the way to other ships.

Towards the end of the day the large square in front of the Finlandsky Station and the adjoining streets were packed with people. Among them were workers from the Putilov, Baltiiski, Nevsky, Treugolnik, Skorokhod and dozens of other factories. The military organisation of the Petersburg Party Committee delegated 7,000 garrison soldiers. Kronstadt sailors had arrived as promised, and men of an armoured car unit were also on hand together with the armoured cars *Ryurik*, *Rytsar* and a third one which was later named *The Enemy of Capital*.

Lenin received a tremendous welcome. In the station building he was given Party card N. 600 of the Vyborg District Organisation. From the top of an armoured car lit up by searchlights Lenin delivered his first speech upon arrival in Russia ending it with the slogan: "Long Live the Socialist Revolution!"

On the next day the leader of the Revolution appeared before the Bolsheviks with his famous *April Theses* in which he set the task of passing from the first stage of the Revolution to the second which would place power in the hands of the proletariat and the poorer sections of the peasants.

The Bolshevik Party, the entire proletariat of Russia, now knew exactly what they had to do.

The proletariat became the principal force which struck the death-dealing blow at the Romanov monarchy, and not only because it became involved in revolutionary activity quicker and to a greater extent than any other social class. The most important thing was that the proletariat as the

most revolutionary class displayed the greatest ability for historical revolutionary action.

A striking manifestation of the proletariat's creative activity was its determination to take advantage of the favourable situation and set up its own organisations. The leading place here undoubtedly belongs to the Soviets, not only the biggest but also the most important organisation of the working people which subsequently became the state form of proletarian dictatorship in Russia.

In addition to the Soviets the proletariat established trade unions which developed into a powerful weapon in the revolutionary struggle of the working people.

Trade unions first appeared in Russia in the flames of the revolutionary battles of 1905-07 as organs of the working class' struggle for economic and political rights. The victory over tsarism in February 1917 stimulated the trade union movement. In those days newspapers were filled with appeals and notices summoning working men and women to join trade unions and unite their efforts in the fight for their rights. These appeals were issued by Party organisations, groups of workers at various enterprises and individual trade union activists. The Bolsheviks played a major role in the organisation of mass trade unions.

At first the trade unions were loosely connected with each other, because at first they were formed not according to the production but to the professional-shop principle. Many enterprises had several trade union organisations at one and the same time. Such fragmentation impeded the consolidation of the proletariat's unity in its fight for class interests. Gradually, however, the trade unions improved their organisation. Central organs in the form of city, regional and district bureaus were established. At the end of June 1917, the Third All-Russia Conference of Trade Unions was held in Petrograd, the first since the overthrow of tsarism. It elected the All-Russia Central Council of Trade Unions and formed the all-Russia trade unions of metal and textile workers uniting an estimated one million men and women.

The strength and the efficiency of the trade union organisations of the working class were dependent directly on their political leadership and they became increasingly battleworthy as the influence of Bolshevism spread in width

and depth. But by far not all trade union organisations came under the immediate control of the Bolsheviks. Carried away by bourgeois illusions, the masses, particularly in the provinces, at first placed their trust in the leaders of the conciliatory parties who persistently worked to confine the trade union activity to tackling problems of the economic struggle and made every effort to uphold their political "neutrality". The conciliators wanted to see the trade unions organised in line with the narrow professional-shop principle.

The Bolshevik Party worked hard to turn the trade unions into militant proletarian organisations and by the autumn of 1917, the overwhelming majority of them had sided with the Bolsheviks and only a few remained under the control of the Socialist-Revolutionaries and the Mensheviks.

The establishment of factory and works committees was splendid evidence of the proletariat's revolutionary creative activity. Elected workers' organisations appeared without permission of the authorities at factories and other industrial enterprises in the course of the February uprising and immediately after it. These organisations had different names, including factory committees, workers' committees and councils of elders and were an absolutely new form of a proletarian organisation.

Prior to the Revolution the workers set up strike committees at their enterprises only in the course of strikes and their tasks were limited. Now the committees formed by the workers were standing representative organisations consisting of the most advanced and active workers who were trusted and displayed a capacity for leadership. It was only natural that from the very outset the Bolshevik influence in them was extremely powerful. Many Bolsheviks experienced in underground activity were members of the factory committees.

Something in the form of dual power existed at the industrial enterprises where alongside the management there were the factory committees which on equal terms with the former had their say in all crucial matters. The vigorous efforts of the factory committees to control and manage the factories encountered the violent resistance of the capitalists,

who demanded that the Provisional Government should use force and exercise its state authority to put an end to what they called "sedition at factories and mills". But the government was powerless in this respect and was forced to issue a law recognising the existence of the factory and works committees.

The formation of the workers' militia and the Red Guard greatly stimulated the revolutionary creative activity of the workers in many industrial centres. The question of arming the people and their military organisation acquired tremendous significance with the fall of tsarism, for the future of the Revolution largely depended on who would be able to gain possession of the weapons. In March 1917, Lenin wrote that "the only *guarantee* of freedom and of the complete destruction of tsarism lies in *arming the proletariat*, in strengthening, extending and developing the role, significance and power of the Soviet of Workers' Deputies".¹

The Red Guard was formed on the basis of workers' detachments which were raised at industrial enterprises and were called "fighting squads", "Party squads", etc. These squads were raised thanks to the broad initiative of the workers under the guiding influence of the Bolshevik Party, the only Party that consistently worked for the consummation of the socialist revolution. Having deep roots in the masses the Red Guard developed and strengthened despite the opposition of the Socialist-Revolutionaries and Mensheviks, who controlled the Soviets up to July 1917, and direct persecution to which it was subjected after the abolition of dual power. During the October Revolution the Red Guard was the principal force which helped the proletariat to depose the Provisional Government and win power.

The proletariat, which smashed the shackles of the tsarist regime and became aware of its actual strength and possibilities, shaped history disregarding all laws and norms which the bourgeois government tried to impose on it.

In March and April, the workers throughout the country waged a determined struggle against the capitalists for the

¹ V. I. Lenin, *Collected Works*, Vol. 23, p. 305.

introduction of an eight-hour working day, one of the main demands of the democratic revolution. Overcoming the resistance of the owners, workers at all industrial enterprises established a new system of work without the official permission of the Provisional Government. The proletarians won the first battle between labour and capital.

The victory of the proletariat of Russia was an example for the workers throughout the world: it was the first to achieve the introduction of an eight-hour working day, one of the principal objectives of the international working-class movement. But the capitalists did not intend to lay down arms and resorted to mass lockouts and closures to counter the offensive of the working class.

It became more and more apparent that if the Russian proletariat wanted to safeguard its gains it had to take political power into its own hands. The proletariat, which was drawn by the revolution into the whirlpool of social activity and became the principal political force spurring on the development of the revolution, continued to search for the correct road, testing itself and its leaders in the process.

Analysing the conditions attending the victory of the October Revolution and naming the principal factors which ensured its success, Lenin noted: "The Bolsheviks were victorious, first of all, because they had behind them the vast majority of the proletariat, which included the most class-conscious, energetic and revolutionary section, the real vanguard, of that advanced class."¹ For 15 years after having emerged as a political trend and party, Bolshevism waged a relentless struggle against opportunism in the working-class movement. It was in this struggle that a genuinely revolutionary proletarian vanguard appeared and became steeled and not only withstood the heavy blows of war, but also won the battle against petty-bourgeois ideology which overwhelmed the toiling masses in the first months following the downfall of tsarism. Each day of the struggle augmented the experience of the proletariat giving it a greater knowledge of its historical tasks.

¹ V. I. Lenin, *Collected Works*, Vol. 30, p. 257.

The mounting influence of the Bolshevik Party found expression in its numerical growth. It had not more than 24,000 members on the eve of the February Revolution, but already in April it had a membership of 80,000. Especially rapid was the growth of the Party organisations in large industrial centres. Foremost representatives of the working class were the first to join the Party. Its membership also included people who, having yielded to petty-bourgeois influence at the beginning of the Revolution, sided with the Mensheviks.

As the trust in the Provisional Government waned the workers with increasing persistence demanded the transfer of power to the Soviets.

On July 3, a spontaneous demonstration of workers and soldiers against the anti-popular actions of the Provisional Government took place in Petrograd. On the next day, with the knowledge and approval of the Socialist-Revolutionary and Menshevik All-Russia Central Executive Committee government troops fired on the peaceful demonstrators. Once again, as it was frequently the case during the monarchy, the workers' demonstration was massacred.

History made a sharp turn. Dual power ended and the counter-revolutionary bourgeoisie attained undivided authority. The Mensheviks and the Socialist-Revolutionaries who controlled the Soviets betrayed the cause of the Revolution.

All possibilities for the peaceful development of the revolution were exhausted. The Soviets, dominated as they were by the Socialist-Revolutionaries and the Mensheviks, were incapable of fulfilling their mission. It was now up to the proletariat, enriched by the experience of the preceding struggle, to take power into its own hands. This could be achieved only through armed struggle. The Soviets would have to be resurrected on a new basis and changed from organs of compromise with the bourgeoisie into organs of revolutionary struggle against the bourgeoisie.

The Sixth Congress of the Party held at the end of July made it clear to all Bolsheviks and the revolutionary proletariat that power could be won only through an armed insurrection.

**"Long Live the
Socialist Revolution!"**

The proletariat of Russia demonstrated its strength and cohesion with particular force during the revolt led by the tsarist General Kornilov who planned to crush the Revolution and establish a military dictatorship. The workers of the entire country rose to the defence of the revolutionary gains against the encroachments of the bourgeoisie which regarded a military dictatorship as the sole force capable of smashing the revolutionary forces, and first and foremost their proletarian vanguard.

The fight to put down the Kornilov revolt stimulated the activity of the Soviets. There followed a period of Bolshevikisation of the Soviets, particularly in important industrial areas.

By the autumn of 1917, the situation in the country grew more and more tense. Economic dislocation caused by the war brought Russia to the brink of a catastrophe. Factories and mines closed by the hundred. Transport was almost paralysed and that aggravated the economic situation to a still greater extent. The monstrous inflation engendered by the issue of vast amounts of paper money depreciated the purchasing power of the ruble to six or seven pre-war kopecks. Things were just as difficult in agriculture. The decrease of the sown areas and the sharp outflow of labour power generated by the mobilisation of millions of men into the army caused a sharp slump in agricultural production and a fearful food crisis. The landowners and the kulaks who possessed the bulk of the grain hid their stocks intending to sell them at speculative prices. As regards the bourgeois power, it made no effort to combat the economic dislocation. On the contrary, it encouraged the capitalists and the landowners in every way in the hope of crushing the revolution with the "bony hand of famine" after it had failed to do so with the help of Kornilov's bayonets.

The working class, the principal producer of material values and the leader of the Revolution, was on the verge of disintegration and physical extinction. One of the most urgent tasks of the day was to save it.

What could be done in the circumstances? How could the catastrophe be averted?

In July, when the working class and the Bolsheviks were

hit by a wave of repressions, Lenin, the leader of the Revolution was forced to work in the underground as he had done during the tsarist regime, and to hide from the "democratic" Provisional Government to escape death. At first he lived near Leningrad in a straw hut close to the Razliv railway station and then moved to Finland where it was less dangerous. His last period of underground activity lasted 110 days during which he wrote over 60 articles and letters. Among them was the work *The Impending Catastrophe and How to Combat It*. The title is eloquent enough. Analysing the situation in Russia, Lenin indicated that the country could be saved from disaster and famine if the government controls, supervises and regulates production and distribution. For this to happen it was necessary to nationalise the banks and syndicates, abolish commercial secrets which concealed the true profits of the capitalists from the knowledge of the people, force the industrialists and businessmen to unite in unions so that their activity could be closely controlled and unite the population into consumer co-operatives. These measures did not signify the direct liquidation of capitalist relations, but the dialectics of development in the revolutionary epoch were such that taken together they constituted a transitional stage to socialism.

There was only one way out: to establish a genuinely revolutionary power in the form of the dictatorship of the proletariat, which alone could institute an all-round people's control over production and distribution, end the criminal war and avert the catastrophe.

"It is impossible to stand still in history in general, and in wartime in particular. We must either advance or retreat," Lenin wrote. "It is impossible in twentieth-century Russia, which has won a republic and democracy in a revolutionary way, to go forward without *advancing* towards socialism, without taking *steps* towards it. . . ."¹

The developments which took place in the autumn of 1917 showed that the people made their historical choice in favour of the proletariat and its Party. The Bolshevik Party had tremendously increased its influence with the masses, and with a membership of 350,000 it was the biggest

¹ V. I. Lenin, *Collected Works*, Vol. 25, p. 358.

and the most influential party in the country. The majority of its members were the foremost workers, the backbone of Russia's proletariat hardened in revolutionary battles. Even people whose weakly developed class-consciousness brought them several months earlier to the side of the Mensheviks and the Socialist-Revolutionaries started to gravitate towards the Bolsheviks.

The Soviets, whose activity had slumped while they were dominated by the Socialist-Revolutionaries and the Mensheviks, once again became a mighty force in the autumn of 1917 when the Bolsheviks gained control in them. They united dozens of millions of workers, soldiers and peasants. Being a combination of both state and public organisations, the Soviets, in Lenin's view, were a "wonderful means" of drawing the masses of working people into state administration. They were a ready-made state apparatus created by the working people themselves, democratic in content and closely connected with the masses. "Compared with the bourgeois parliamentary system," Lenin wrote, "this is an advance in democracy's development which is of world-wide, historic significance."¹

In the autumn of 1917, the class struggle between the working people and the exploiters both in town and country became extremely acute. And the proletariat was in the vanguard of this struggle. The working-class movement gained greater momentum and acquired qualitatively new features. It was absolutely clear that its principal political aim was to put the Soviets in power.

The day of the uprising drew close. On October 10, the Central Committee of the Bolshevik Party adopted an historic resolution drawn up by Lenin recognising that the situation was ripe for beginning the uprising and recommended all organisations "to discuss and decide all practical questions... from this point of view."² On October 12, the Executive Committee of the Petrograd Soviet decided to establish a Revolutionary Military Committee which would mobilise and prepare the forces for the armed uprising and ensure its military-political and operational organisation.

¹ V. I. Lenin, *Collected Works*, Vol. 26, p. 104.
² *Ibid.*, p. 190.

The Party's militant centre elected by its Central Committee on October 16 became the leading core of the Revolutionary Military Committee.

The historic moment arrived. On October 24, the Provisional Government made an attempt to smash the revolutionary forces. Military cadets raided the editorial office of *Rabochy Put* (the name under which the Bolshevik *Pravda* was published at the time) and were ready to attack the Smolny housing the Central Committee of the Bolsheviks and the Revolutionary Military Committee. The armed struggle for power was under way.

"The situation is critical in the extreme," wrote Lenin on the evening of October 24. "In fact it is now absolutely clear that to delay the uprising would be fatal."¹

A few hours later Lenin left his secret address in Vyborg District and arrived at the Smolny to assume the leadership of the uprising.

The workers' Red Guard units which made up the assault force of the uprising were to fulfil the main tasks. They were to capture the most important strategic objectives in the city, thwart the efforts of the counter-revolution to suppress the uprising, cover the rear of the insurgent forces and take up defences at the approaches to the city and lead the revolutionary soldiers and sailors into action.

On the morning of October 24, factory whistles in all parts of the city signalled assembly. Thousands of armed workers moving from the suburbs converged on the Smolny, the headquarters of the Revolution. The night of October 24 brought a decisive victory to the people. Encountering almost no resistance the workers swiftly occupied a number of government institutions and gained control of the railway stations, the post and telegraph offices and the bridges across the Neva connecting the city's proletarian districts with the centre. By the morning of the 25th, almost the whole city was in the hands of the revolutionary forces. Only the troops defending the Winter Palace where the Provisional Government was entrenched continued to resist. At 10 a.m., on October 25, the Revolutionary Military Committee issued a manifesto which said:

¹ V. I. Lenin, *Collected Works*, Vol. 26, p. 234.

"The Provisional Government has been deposed. State power has passed into the hands of the organ of the Petrograd Soviet of Workers' and Soldiers' Deputies—the Revolutionary Military Committee, which heads the Petrograd proletariat and the garrison.

"The cause for which the people have fought, namely, the immediate offer of a democratic peace, the abolition of landed proprietorship, workers' control over production, and the establishment of Soviet power—this cause has been secured.

"Long live the revolution of workers, soldiers and peasants!"¹

By the evening, units of workers, soldiers and sailors had moved into position at the approaches to the Winter Palace. At 9.40 p.m., a blank shot fired by the cruiser *Aurora* anchored in the Neva signalled the beginning of the storm of the Winter Palace. By 2 a.m. on the 26th, the last citadel of the bourgeois Provisional Government had fallen. The armed uprising in the capital ended in victory.

The revolution triumphantly swept across the whole of Russia. Everywhere the workers and peasants overthrew the bourgeois rule and established their own, people's Soviet power. In many cities with a developed industry and a large number of workers the Soviets assumed power without bloodshed, in others it was established in bitter battles.

"Let us imagine for a minute that the Bolsheviks will win," wrote a bourgeois newspaper two months prior to the uprising. "Then who will rule us? Perhaps fitters will take care of the theatres, plumbers of diplomacy and carpenters of the post and telegraph?... Will all this happen? No. Is it possible? To this incredible question history will deliver a firm answer to the Bolsheviks."

History did provide the answer. Fighting was still going on in Petrograd when the delegates to the Second All-Russia Congress of Soviets gathered in the white-columned hall of the Smolny to take over the administration of the country. They were fitters and grooms, smiths and turners, soldiers and sailors, all those whom the bourgeois newspaper treated with such sarcasm. Yes, they were not very literate

¹ V. I. Lenin, *Collected Works*, Vol. 26, p. 236.

and completely uneducated. But they knew how to work, they knew what the people needed, and boldly immersed themselves in the most crucial affairs of the state. The Congress adopted the Decrees on Peace and Land. Two vital issues whose solution was long awaited by Russia's working masses were solved by ordinary workers and not by the gentry who boasted about their education and statesmanship. The appeal of the Congress to all belligerent countries to conclude a universal democratic peace and establish good-neighbourly relations regardless of their social systems and different political views resounded throughout the world. Since then the principles set forth in the Decree on Peace have been a cornerstone of Soviet foreign policy.

By adopting the Decree on Land Soviet power once and for all time abolished landed proprietorship. The age-old dream of the peasants, a dream for which the foremost representatives of many generations had fought and died, became a reality. Henceforth and for ever land in Russia became the property of the whole people.

The Congress formed Russia's first workers' and peasants' government headed by Lenin.

History witnessed many revolutions. But oppressors came and went, and the exploitation of the people continued. The October Revolution put an end to any and all exploitation of man by man. The proletariat, the most revolutionary class in modern society, came to power. It emerged on the historical scene and becoming steeled in class battles justly occupied the leading place in the people's fight for liberation. The proletariat shouldered the main burden of this struggle and demonstrated that although it constituted the minority of the population it was capable of overthrowing the bourgeoisie. It showed that it was united in its efforts, that it had its own militant revolutionary party and stood at the head of the working masses.

The proletariat won power. Now it had to uphold its gains, learn how to administer the country and for the first time in history build socialist society in which there would be no private ownership of the means of production and no exploitation.

The dawn of a new life was rising over Russia.

FROM BATTLE TO LABOUR, FROM LABOUR TO ATTACKS (1917-1920)

The Red Guard Attack on Capital

The Winter Palace has just been taken. The new social system is but a few hours old. A revolutionary patrol escorts the arrested ministers of the Provisional Government into the low-browed hall of the Peter and Paul Fortress. Though scared and shocked, the ministers kept on blustering refusing to believe that their time was over and that the people would be able to administer the state and economy without them.

The establishment of the new Soviet state apparatus was an exceptionally difficult task. In those days the bourgeois press wrote with malicious pleasure that the rule of the Bolsheviks would be short-lived since they would neither be able to gain control over the old apparatus nor build up a new one. Recalling this period A. V. Lunacharsky wrote that the "capture of the Winter Palace by no means signified that power had passed fully into our hands. Though the ministers were arrested, the ministries were still filled with enraged officials who were resolved not to co-operate with us and resorted to the most scandalous forms of resisting the introduction of our methods."

But, as Lenin put it, the dictatorship of the proletariat had a wonderful means at its disposal enabling it to augment the state apparatus tenfold at one stroke: the involvement of the working people into the daily administration of the state. The capitalist world lacked this means, not that it could ever have it. The revolutionary creative activity of

the masses resulted in the establishment of the Soviets, and the workers and peasants were actively helping to organise state economic, army, judicial and other organs.

The first group of officials of the Commissariat for Foreign Affairs consisted of workers of the Siemens-Schuckert works, the Red Guards and some of the office workers who had sided with the Revolution. Headed by G. I. Petrovsky, a worker, the Commissariat for Internal Affairs was staffed by workers of the Putilov factory, and the Commissariat for Education by the workers of the Vyborg District of Petrograd.

The institution of workers' control over production inaugurated the socialist transformation of industry. On November 14, 1917, the All-Russia Central Executive Committee and the Council of People's Commissars approved a special decree authorising the transformation of all elected bodies—factory committees, councils of elders and control commissions—from public bodies, which they had been until October 1917, into organs of state power, into cells of the dictatorship of the proletariat.

The factory owners frantically resisted the introduction of workers' control regarding it as a threat to their property. In December 1917, the Union of the Joint Industry of the Ivanovo-Voznesensk Region advised factory boards to allow the introduction of workers' control provided its functions would be limited to collecting information only.

In November 1917, the Urals mineowners instructed by their offices in Petrograd decided that "in the event of workers' control being introduced, factories are to be closed and money withheld", thus threatening the Urals workers with starvation.

At the end of November 1917, the Urals Regional Soviet of Workers' and Soldiers' Deputies sent one of its deputies, V. Vorobyov, to the capital where he described the situation to Yakov Sverdlov. In view of the importance of the matter Sverdlov and Vorobyov decided to refer it to Lenin who received them there and then in the Smolny. Having questioned them in detail about the developments in the Urals he wrote the following note: "The bearer, Comrade Vorobyov, a delegate from the Urals, has excellent references from his local organisation. In the Urals, there is a most

acute problem. The boards of the Urals works *here* (with offices in Petrograd) should be *arrested* immediately, threatened with (revolutionary) court proceeding for bringing about a crisis in the Urals, while all the works in the Urals should be *confiscated*. Draw up a draft decree as soon as possible."¹

At the beginning of December 1917, members of the Central Council of Factory Committees of the Bogoslovsk Mining District arrived in the Smolny. They said that the district could have gone over to peaceful production if not for the sabotage of its board which was withholding the workers' wages.

Learning this Lenin asked whether discipline would not slacken if the workers themselves took over the management of the factories. The delegates replied that there was no need to worry and that things would be no worse than under the former owners.

Several days later the Council of People's Commissars decreed the nationalisation of the Bogoslovsk Mining District.

By the autumn of 1918, more than 70 per cent of industrial enterprises each employing over 200 workers had their own workers' control bodies. At first there were cases of faulty guidance characterised by separatist and parochial tendencies which encountered vigorous opposition on the part of the Bolsheviks. Lenin wrote in this connection that "any direct or indirect legalisation of the rights of ownership of the workers of any given factory or any given trade on their particular production, or of their right to weaken or impede the orders of the state authority, is a flagrant distortion of the basic principles of Soviet power and a complete rejection of socialism".²

On the whole, workers' control played an historical role in preparing the workers for the job of building up and managing industry. "We did not decree socialism immediately throughout industry," Lenin wrote, "because socialism can only take shape and be consolidated when the working class has learnt how to run the economy and when the authority of

¹ V. I. Lenin, *Collected Works*, Vol. 36, p. 459.

² *Ibid.*, Vol. 42, pp. 100-01.

the working people has been firmly established. Socialism is mere wishful thinking without that. That is why we introduced workers' control, appreciating that it was contradictory and incomplete measure, but an essential one so that the workers themselves might tackle the momentous tasks of building up the industry in a vast country without and opposed to exploiters."¹

Through their participation in workers' control the workers learned how to run industrial enterprises. The Bolsheviks conducted extensive propaganda of the Party's economic policy among the Communists and non-Party people. In Party schools lectures were delivered on the economic policy of the Soviets, the organisation of workers' control, the organisation and remuneration of labour, the relations between state and trade union bodies, and so forth. The Soviets also organised special workers' control courses and exchange of experience. Workers' control bodies produced many prominent Soviet economic executives including M. N. Zhivotov, V. Y. Chubar, S. G. Uralov, A. M. Kaktyn, S. V. Kosior, M. V. Rykunov and A. A. Andreyev.

The development of workers' control paved the way for the shift to the centralised management of industry through the Supreme Economic Council (SEC). The question of establishing this body was taken up by the All-Russia Central Executive Committee. The Mensheviks called for the inclusion of factory owners into SEC. The Left Socialist-Revolutionaries wanted to give two-thirds of the seats in it to representatives of "peasant democracy" and to establish it under the All-Russia Central Executive Committee and not under the Council of People's Commissars. Lenin opposed both suggestions. He declared that "the Supreme Economic Council cannot be reduced to a parliament, but must be the same kind of a fighting organ for combating the capitalists and landowners in the economy as the Council of People's Commissars is in politics".² The All-Russia Central Executive Committee adopted Lenin's proposal by 265 votes against 12. On December 2, 1917, the Executive Committee and the Council of People's Commissars gave their final approval of

¹ *Ibid.*, Vol. 28, p. 139.

² *Ibid.*, Vol. 36, p. 458.

the Decree. At the time all institutions controlling the economy were subordinated to the SEC, which also presented all draft laws and major measures in this sphere for government consideration. The Council united and guided the activity of all workers' control bodies and the economic departments of local Soviets.

On December 23, 1917, the SEC approved the statute on local economic councils which were departments of local Soviets. These councils were established on the basis of workers' control bodies and the economic departments of the SEC: many former workers' control activists became members of the economic councils. The establishment of the SEC and its local bodies—in regions, gubernias and uyezds—played an important role in the development of the socialist economy and in the struggle for the socialisation of the means of production.

The nationalisation of industry, one of the most important points of the programme of the proletarian revolution, was carried into life both by the central organs of the Soviets—the Council of People's Commissars and the Supreme Economic Council—and by the local Soviets and their economic councils. The first phase of the nationalisation of industry lasted from November 1917 to February 1918 and came to be known as the period of the "Red Guard attack on capital". Of the 836 enterprises socialised in these months, the local Soviets accounted for 640 or 76.5 per cent.

The first enterprise to be nationalised was the Likino Textile Mill whose owner closed it down to sabotage production. In response the workers sent delegates to the capital where they were received by Lenin. The Council of People's Commissars instructed the Commissariat for Labour to study the question and resolved on November 17, 1917 to proclaim Likino Mill the property of the Russian Republic.

The same year the Executive Committee of the Saratov Gubernia Economic Council considered the conflict between the owner of a glass factory in the village of Khvatovka and the workers who in their complaint painted a vivid picture of the merciless exploitation to which they were being subjected. Though it was a very profitable enterprise it had neither electric lighting, nor ventilation, nor drinking water

for the employees. The Economic Council nationalised the enterprise and took measures to improve working conditions.

On November 24, 1917, the Council of People's Commissars adopted a resolution confirming the right of the local Soviets to fight the sabotage of the industrialists and confiscate their enterprises.

The establishment of the power of the Soviets and the nationalisation of the first enterprises increased the responsibility of the workers for strengthening labour discipline. On November 17, 1917, the conference of the board and factory committees of Petrograd metalworkers passed a resolution saying that any worker guilty of violating trade union and labour discipline should be expelled from the union and discharged. On November 21, 1917, Putilov workers appealed to all metalworkers "to muster strength, maintain organisation and internal discipline in the fight against the enemies of the Revolution". On December 5, 1917, the factory committee of the Sormovo Works proclaimed that "in the present circumstances any strike action, even for the purpose of improving the economic position of workers, is impermissible for it would only play into the hands of our enemies who are intent on stopping production". In January 1918, the workers of the Rostokino dyeing and finishing factory in Moscow resolved to raise labour productivity and establish labour discipline and order at their enterprise.

The initiative displayed by foremost-thinking workers greatly stimulated the struggle to overcome economic dislocation and to establish the socialist mode of production in industry and in the economy as a whole.

Organising and guiding this process the Bolsheviks took over the banks thus avoiding the mistake of the Paris Commune.

At 6 a.m. on October 25 (old style), a detachment of armed sailors surrounded the State Bank on Yekaterininsky Canal and posted guards at all entrances and exits, at all telephones connected with the city exchange and at all strongrooms. This was done with the assistance of the bank guard. But the senior officials stopped work and by noon all private banks in the city suspended operations.

At 3 p.m., V. R. Menzhinsky, a professional revolutionary who was temporarily appointed Commissar of the Ministry

of Finance, arrived at the ministry. But the senior officials there refused to obey his orders. The bankers promised to pay the striking officials of the Finance Ministry and the State Bank a three months' salary.

Their sabotage created serious difficulties for the new power for the workers were unable to get their wages. The strike of the bank workers was a part of a large-scale mutiny conceived by Kerensky and Krasnov with the view to overthrowing the power of the Soviets.

The mutiny was put down but that did not bring the striking officials to their senses and it became clear that they would not be talked into resuming their duties. The situation changed only on November 15 when the dismissed officials were replaced with workers, soldiers and sailors who had a knowledge of bookkeeping and accounting. The Party Central Committee sent Communists capable of running the various departments in the Ministry and the State Bank. Among them were old Bolsheviks and junior bank employees. On the same day the keys to the bank's eight strongrooms were handed over to the new manager V. V. Obolensky and in the evening were delivered to the Smolny. On November 17, the State Bank sent five million rubles to the Smolny, a sum which made up the first Soviet treasury.

It was a victory which facilitated the nationalisation of the private banks which was thoroughly prepared under the supervision of Business Manager of the Council of People's Commissars V. D. Bonch-Bruyevich.

There were 28 private banks and credit associations in Petrograd, and their take-over had to be prepared in complete secrecy so that the operation would catch the bankers and directors unawares.

Early in the morning of December 14, 28 lorries and 28 automobiles drove out of the gates of the Smolny and pulled up at their assigned objectives. The operation was over without any complications by 11 a.m. Worker-commissars sealed the vaults, drew up brief protocols and transferred all the materials to the Smolny. Many rank-and-file employees consented to continue work as did some of the arrested directors.

In the evening the Central Executive Committee passed the decree on the nationalisation of the banks.

The local branches of the banks were nationalised in the latter half of the month. When the Third All-Russia Congress of Soviets convened, 138 out of 317 Soviets which took part in it were already in control over local treasuries and 112 over the banks.

Assessing these developments Lenin noted in his report to the Congress: "The nationalisation of the banks was one of the first measures adopted for the purpose, not only of wiping the landowners from the face of Russian earth, but also of eradicating the rule of the bourgeoisie and the possibility of capital oppressing millions and tens of millions of the working people."¹

Having nationalised the banks the Soviets continued their offensive on capitalist property. On January 23, 1918, the Council of People's Commissars decreed the confiscation of the joint-stock capitals of private banks. In this way the capitalists were prevented from controlling the activity of the republic's People's Bank, and the Soviet state made another step towards liquidating the "regime of the bankers' omnipotence".

The passing of the banking system into the hands of the Soviets played an important role in the nationalisation of whole sectors of the economy, the railways, the merchant marine and for the establishment of state monopoly over foreign trade inasmuch as the banks were an extremely important apparatus of account and control, the nerve centres of the entire national economy. These measures, enacted from the end of 1917 to the beginning of 1918, were essential for the Soviets to gain further control of the economy, the principal sphere of the fight for socialism. As things turned out, however, the crucial task in those years became the defence of Soviet power against the whiteguards and the interventionists.

On February 21, the Council of People's Commissars adopted the decree "The Socialist Fatherland Is in Danger" written by Lenin. On the following day the *Pravda* published an appeal which read:

**For the Defence
of the Revolution**

¹ V. I. Lenin, *Collected Works*, Vol. 26, p. 466.

"Workers and soldiers!

"Counter the bandit invasion of German whiteguards by moving revolutionary detachments of the Workers' and Peasants' Red Army into action.

"Workers of Petrograd, soldiers! Vanguard fighters! Rise up to the defence of the revolutionary capital, the red fortress of the world revolution!

"To arms!"

The response was immediate. An example of high class-consciousness and Soviet patriotism was set by the workers of Petrograd where there was not a single workers' collective which did not respond to the call of the Party and Government. By March 1, 1918, 22,000 Petrograd workers had volunteered for service in the Red Army.

The situation in Moscow was the same. On February 27, Moscow newspapers carried the following report: "At many factories all workers without exception are joining the Red Army. In general spirits are very high in workers' districts. The Soviet of Workers' Deputies has decided to go to the front in a body if peace is not concluded." By the end of the month, 20,000 Muscovites had joined the Red Army. Thousands of workers from the frontline towns volunteered for service.

In the Urals the mobilisation of Communists promptly acquired a mass character. They issued the following appeal to the workers: "Factory workers and toilers of the countryside, join the fight. Put down your tools and ploughs and pick your swords. The time has come for us to fulfil our duty to the Revolution. . . ."

A mighty revolutionary torrent fed by thousands of streams made up of detachments of workers and soldiers, peasants and sailors barred the way to the invaders. At first the Red Army was formed out of volunteers. Its ranks were swelled by Red Guard detachments which in their majority consisted of workers. By the summer of 1918, it had approximately 450,000 men. In effect, the army of the Soviet state was a proletarian military organisation at the time, for its nucleus was made up of workers.

But in the face of the mounting military threat the Government was forced to introduce universal military service.

Recruiting offices had their hands full. As a result of the first mobilisation drive in the summer of 1918, about 9,000 Moscow and 15,500 Petrograd workers were recruited.

Bidding farewell to their comrades, the workers urged them to fight staunchly and bravely for their country. The workers of Moscow, for instance, asked the recruits to tell the Red Army, that the workers and their wives and children looked upon it with hope, because the existence of the Soviet republic depended on their brothers who were fighting at the front, and that the life of hundreds of thousands and millions of workers was in their hands. "You must tell them everything," they instructed the departing men, "and if necessary show them that you are prepared to die for the cause of the working class."

By the autumn of 1918, the strength of the Red Army has risen to about a million men. It was a genuinely people's army. The greater part of the mobilised replenishments came from the countryside, where the majority of the population lived. The workers became the layer which cemented the peasants and the townsfolk in the army into a single whole and turned it into the Workers' and Peasants' Red Army.

The famous 25th Chapayev Division consisting of various partisan detachments, included a regiment of Ivanovo-Voznesensk workers. Firmly welded together by factory discipline and displaying a high degree of revolutionary consciousness they helped to turn the Chapayev division into a highly disciplined fighting formation whose battle exploits won it undying glory.

The history of another famous Red Army formation, the Iron Division, is a vivid example of the alliance of the workers and peasants. Its first commander G. D. Gai-Bezishkhyan made the following entry in the division's service record: "Name—Iron. Date of birth—July 1918. Parentage—October Revolution. Social origin—workers and peasants of Simbirsk and Samara gubernias."

During the most crucial periods in the history of the Soviet state the Bolshevik Party relied on this indestructible alliance, viewing the enlistment of "wider sections of the working class in the active defence of the country"¹ as essential for victory.

¹ V. I. Lenin, *Collected Works*, Vol. 29, p. 276.

In the spring of 1919, when Kolchak's army presented the greatest danger to the Revolution, Lenin, on behalf of the Party Central Committee wrote a letter to Petrograd workers requesting them "to do everything possible, to mobilise all forces to help the Eastern Front ... where the fate of the Revolution is being decided".¹

The Petrograd workers responded by sending 42,413 men to the Red Army in the period from April to June 1919.

Addressing the Moscow City Conference of Factory Committees and Trade Unions on April 17, Lenin called upon the workers of the capital to directly join the fight against Kolchak. "All efforts must be exerted," he said. "Every class-conscious proletarian would have to take part in the mobilisation."² Lenin's speech created a great impression. In a note which was passed on to the presidium immediately after Lenin had finished speaking Mikhail Vinogradov, a worker, wrote: "Comrades, are we going to surrender our workers' and peasants' power to a former flunkey of the tsar? No, we paid a great price for it, we paid for it with our blood. I am married. I am fifty, but I am taking a rifle in my hands and joining the ranks of the young people to defend Soviet power with my life."

Applications from thousands of workers requesting to be sent to the Eastern Front flooded Party cells, District and Gubernia Party Committees throughout the country.

Sixteen thousand workers went to the front in response to the Party mobilisation, 3,000 in response to the Komsomol mobilisation and another 60,000 were sent to the Red Army by the trade unions.

In the summer of 1919, the Entente launched a fresh drive against the Soviet republic and in October, the situation in the country became precarious. For the first time during the Civil War the enemy managed to break through to within such a short distance from the cradle of the revolution, Petrograd, and from the heart of Soviet Russia, Moscow.

During this late autumn with its unceasing rains the Party issued the appeal "All Out for the Fight Against Denikin!" in response to which the workers of the industrial centres

¹ V. I. Lenin, *Collected Works*, Vol. 29, p. 275.

² *Ibid.*, p. 323.

sent additional thousands of Communists, Komsomol members and non-Party people to the frontlines. The Communists of Petrograd gave the front 4,000 soldiers, commanders and political workers. In October alone, Moscow dispatched more than 3,000 Communists to the Red Army, Tver Gubernia sent over 700 and the Ivanovo-Voznesensk Gubernia more than 500. All told about 25,000 Communists and 10,000 Komsomol members were sent to the army in the field in the autumn of 1919. Workers' volunteer detachments were formed. Comprising from 15 to 17 per cent of the strength of the armies fighting on the Southern Front, the workers constituted the force which inspired the Soviet troops to fight until complete victory.

After the defeat of Denikin and Yudenich, when it seemed that the Soviet state had exhausted all its reserves, the White Poles and Wrangel's troops undertook an attempt to crush Soviet power. Summoning the people to rise to the defence of the country, the Communist Party once again proclaimed mobilisation of its members, and 25,000 Communists came to the assistance of their comrades at the front. As always the workers were in the forefront of the defenders of the socialist homeland. The proletarians of Petrograd and Moscow, Tula and Ivanovo-Voznesensk arms in hand went to fight the interventionists and the whiteguards.

When the Red Army and Navy fought their last decisive battles they had 619,400 workers in their ranks, the principal revolutionary driving force which made the men consciously organised, enduring and disciplined. Many gifted commanders emerged from the midst of the working class. They practically demonstrated the unlimited abilities of the working class now participating in creative activity.

Vassily Blukher passed his first test in the fight against oppression at the early age of 19. Then, in 1910, he was sentenced to 32 months' imprisonment for participating in the strike of the workers of the Mytishchi Carriage Building Works. But the young fitter did not give up the struggle. On the contrary, he obtained a better understanding of it. He joined the Bolshevik Party and in October 1917 took part in establishing Soviet power in Samara. A year later, he was already known throughout the country as a capable and fearless military commander.

Vassily Blukher was the first to be awarded the republic's highest military decoration: the Order of the Red Banner.

What did he do to merit such a high distinction?

In the summer of 1918, when the whiteguard troops seized almost the whole of the Urals, small scattered Red Army units began to assemble in Beloretsk which was still unoccupied by the enemy. One of the units was under the command of Blukher, then the first chairman of the Chelyabinsk Revolutionary Committee. Soon there were several thousands in the town waiting to be led out of the encirclement. On August 5, 1918, a detachment of 10,000 Urals workers and their families began their unprecedented march along difficult mountain roads to link up with the Soviet forces. They formed a column 20 kilometres long. On the way the men had to beat off enemy ambushes and attacks, break through fortifications and cross rivers under hurricane fire.

Blukher was always where the danger was the greatest. He was loved by the men as much as he was feared and hated by the whiteguards who offered 20,000 rubles for his head.

On September 13, his detachment linked up with the Red Army after completing a 1,500-kilometre march behind enemy lines. In a cable to the Soviet Government the Urals Regional Party Committee wrote: "Blukher and his regiments are real heroes who have performed an exploit unparalleled in the history of our Revolution."

When the Germans launched the occupation of the Ukraine the proletarian centres in that part of the country began to raise armed detachments to beat off the invading forces. One of the first to be raised was the Lugansk Socialist Detachment. Its commissar was Kliment Voroshilov, a Lugansk worker and Bolshevik, whom the workers shortly elected their commander. He took over power in Lugansk and restored the town's economy. During the Civil War Voroshilov commanded the 5th Ukrainian Army and the Tsaritsyn Front. He also held the post of commander of the 10th Army of the Southern Front and was a member of the Front Revolutionary Military Council. Subsequently he was made Marshal of the Soviet Union and appointed People's Commissar for Military and Naval Affairs.

A key resistance point of Soviet power in the southeast of Russia was the town of Tsaritsyn, a proletarian centre in

the lower reaches of the Volga River. It was a junction of communications connecting the centre of the country with the Northern Caucasus and also divided the counter-revolutionary forces operating in the south and the east. That was why the approaches to the town were a crucial sector of the military operations conducted in the summer and autumn of 1918.

The Tsaritsyn Party organisation mobilised all its available forces to beat off the enemy's onslaught. During the fighting 10,000 workers joined the city's defenders and together with the workers of the Donets Basin who had retreated to the Volga under German pressure made up the core of the Tsaritsyn defences. Moscow helped Tsaritsyn by sending a regiment consisting of metalworkers from the Goujon and Dynamo works. The regiment was incorporated into the Communist Division, one of the most efficient in the area, and took part in the heaviest engagements.

Night and day the Tsaritsyn factory workers dug trenches and built fortifications. Ordnance and iron and steel works built and repaired weapons, made ammunition and equipment for armoured trains and ships. It was a frontline city in the full sense of the word.

"We operated our lathes with an ammunition bag slung over our shoulders and a rifle within easy reach," recall the veterans. "If the day was more or less quiet, we would be out for drill in the evening. Frequently horses drawing an artillery piece, its barrel still hot, would rush through the open gates. And while the lather dried on the animals and the gunners had something to eat, we repaired the damaged lock or whatever else was out of order. There was firing range and the gunners adjusted the fire at the frontline."

Having worn down the whiteguards and ground down their best forces in bitter battles, the Tsaritsyn Front went over to the offensive, routed the enemy and hurled them back far from the city.

In May 1919, the Central Committee of the Russian Communist Party (Bolsheviks) put out an appeal to the working people which read: "Soviet Russia is not in a position to surrender Petrograd even for a short while. Petrograd must be defended at all costs. Too great is the significance of this city, which was the first to raise the banner of the uprising

against the bourgeoisie and the first to achieve a decisive victory."

Petrograd workers together with the troops who had arrived from the centre took part in smashing Yudenich's forces at their city. Almost all Communists were at the frontlines. Armed detachments were formed directly at factories and were promptly sent to the firing lines. A meeting at the Okhta Gunpowder Factory adopted the following resolution: "All honest and class-conscious workers should join the detachment which is being formed at the factory to repulse the enemy." The next morning the detachment was committed to action.

The first three Soviet tanks made at the Putilov and Izhora works went into action the day the counter-offensive was launched at Petrograd. Senior foreman of the Izhora Works S. V. Vasilyev was in command of the armoured detachment.

The heroic defence of Uralsk, which became an unassailable fortress for the troops of Kolchak, lasted ten weeks. All Communists took up arms and together with the non-Party people formed a communist detachment. The railway workers outfitted the armoured train *Nezhdanny* which helped repulse numerous whiteguard attacks. The town was defended by the 22nd Rifle Division whose commissar was a worker from Petrograd I. I. Andreyev.

"Please convey to the Uralsk comrades," Lenin cabled, "my warm greetings for the heroes of the fifty days' defence of besieged Uralsk, and my request not to get down-hearted, and to hold out just a few more weeks. The heroic defence of Uralsk will be crowned with success."¹

At the time the southern group of forces was pressing home the offensive at Ufa. On the night of June 7, the 25th Chapayev Division crossed the Belaya River using boats, logs, barrels and planks. Heavy fighting broke out.

By nightfall on June 9, after two days of bloody fighting, the 25th Division liberated Ufa and a month later, on July 11, came to the assistance of the defenders of Uralsk. The Defence Council commended the Red Armymen and the commanders for their "revolutionary military valour" during the siege of the town.

¹ V. I. Lenin, *Collected Works*, Vol. 35, p. 400.

In recognition of the proletariat's meritorious conduct in the face of the enemy the Order of the Red Banner was conferred on Petrograd, Tsaritsyn, Lugansk, Grozny, Kopeisk and Tashkent.

Shoulder to Shoulder The Communists were in the front ranks of the defenders of the Soviet homeland. By April 1920, the Party had 611,978 members, or almost twice as many as a year before. In its entire activity the Party depended on the organised workers. By 1919, an estimated 3,422,000 workers were members of trade unions of which the biggest united the textile workers, railwaymen and metalworkers.

The Second All-Russia Congress of Trade Unions held in January 1919 consolidated the trade unions both organisationally and ideologically. It expelled Menshevik and Socialist-Revolutionary elements from the leading bodies and supported Lenin's views concerning the role of the trade unions in conditions of the dictatorship of the proletariat. The Congress called upon the workers to mobilise their forces to combat famine and economic dislocation and set up a Central Commission for assisting the Red Army.

Together with the Party the trade unions conducted repeated mobilisation of its members. The All-Russia Central Council of Trade Unions sent ten per cent of the union members to the front against Kolchak's forces. Those who were mobilised in Saratov, Pskov and Vitebsk made up 20 per cent and those mobilised in Simbirsk made up 50 per cent of the total trade union membership. When Yudenich was threatening Petrograd the City Trade Union Council organised a school for machine gunners and formed armed detachments of railwaymen, water-transport workers and communications workers. All district headquarters responsible for the formation of workers' regiments were headed by metalworkers, with the exception of the Okhta district, where their activity was guided by chemical workers. Trade union locals intensified control over the output of munitions factories, guarded the power stations, the telegraph offices, the telephone exchange and bakeries against possible sabotage.

A "Defence Week" was held in October 1919 in the course of which trade union organisers and the Communists spoke at meetings and conferences mobilising the workers against

the whiteguards. Thousands of workers enlisted into the Red Army in Moscow, Tula and Orel.

A resolution passed by the Tula Gubernia Conference contained the following points:

"1) Temporarily to reduce to the minimum the current trade union activity and urgently adjust the trade union apparatus to military needs.

"2) The Conference alerts all trade unions for action.

"3) Reserve workers' regiments are to be organised..."

Strikes were organised by trade unions and underground Party committees operating behind enemy lines. In the autumn of 1919, there were strikes by metalworkers and employees of tobacco factories in Kharkov, by miners in Gorlovka, Makeyevka and Yenakievo and by the metalworkers in Lugansk and Yekaterinoslav.

The trade unions engaged in underground activity together with Party committees in Siberia and the Far East. In October 1918, industrial workers in the towns on the Trans-Siberian Railway struck in support of the railwaymen. The miners of Suchan advanced the slogan: "Not a single ton of coal for Kolchak." For two months the counter-revolutionaries and the interventionists undertook futile attempts to break the strike.

Ten thousand miners in Cheremkhovo staged a strike in protest against the arrest of their trade union leaders in the summer of 1919. Mass reprisals were used to crush the strike. But the job was done, Kolchak's troops were unable to reach the Eastern Front on schedule.

Young workers, the first generation of the Komsomol, fought fearlessly shoulder to shoulder with their elder comrades.

In those days the following notice was pinned to the boarded-up doors of many Komsomol committees: "The District Committee is closed. All have gone to the front." At the call of the Party the Komsomol members performed the most difficult assignments, and nothing could break their will or determination.

All the Komsomol members in Petrograd above 16 years of age went to the frontlines and many young workers followed their example. In the last weeks of October 1919, over 1,500 of the 2,645 young workers in Vyborg District

who were not members of the Komsomol volunteered for service in Komsomol detachments formed in almost all districts of the city and at most factories.

Armoured trains, most of which were manned by young people, played a great role in smashing the whiteguard forces. Many trains had very little armour and it was only the courage and dedication of their crews that turned them into such formidable weapons.

The writer Arkady Gaidar, who was one of the first to join the Komsomol and at the age of 17 commanded a regiment, once said: "It is not my life that is extraordinary but the times. It is simply an ordinary life and an extraordinary time." These words apply in full measure to thousands of other people who had fought in the Civil War against the whiteguards.

The Fight for Grain Early in May, the Putilov workers sent a representative to Lenin with the request to tell him about the situation in Petrograd and to discuss ways and means of obtaining food. Lenin asked him to tell the Petrograd workers that if the forward-thinking workers would not raise an army for a campaign against the rural bourgeoisie and the bribe-takers it would be impossible to avert famine and the collapse of the revolution.¹

In view of the extraordinary situation prevailing at the time the relations between the working class and the peasants acquired new forms. The ties between town and country were disrupted. Many factories were closed or converted to a war footing. Even prior to the Revolution the factory owners decided that they would resort to sabotage as a means of fighting the workers. It was impossible immediately to improve the economic situation in the country and provide the peasants with the commodities they needed. And yet there was grain in the country. By the spring of 1918, there were 41 million poods of surplus grain in Russia alone (excluding Northern Caucasus). But most of it was in the hands of the kulaks who prior to the Revolution gave the country 50 per cent of the total marketable grain. As regards the village poor, they never had enough food. Although the poorest sections of the peasantry together with the agricultural pro-

¹ *Lenin Miscellany XVIII*, Russ. ed., p. 168.

letariat comprised 65 per cent of the rural population and the kulaks only 15, they were unable to take the grain away from them. The kulaks who held the poor peasants in economic dependence also managed to worm their way into the village Soviets. There was only one way of making them surrender their surplus grain and that was by setting up "food dictatorship". And the peasants were also aware of this.

"Comrade Bolsheviks," wrote the peasants of Kostroma Gubernia, "we need people who know your policy, strong people who could fight against the kulaks. Send them quickly. It is time for us to begin building a new life, but here there are kulaks in almost all organisations."

It was necessary to help the poorest sections of the peasants to organise and fight against the rural bourgeoisie. It was a job which only the advanced workers could tackle and they sent their representatives as the vehicles of the Soviet policy to the villages. Once V. D. Bonch-Bruyevich, Business Manager of the Council of People's Commissars, asked Lenin whether he could describe in one word what Soviet power was fighting for at the moment. "Grain," Lenin replied.

Without grain it would have been impossible to preserve the working class, to keep the factories going, to supply the Red Army and prevent the rural poor from dying from hunger. That was why Lenin said that the fight for grain was a fight for socialism.¹

There were people, even prominent leaders, who said that it would be a grave mistake to weaken the proletarian centres by sending the best workers to the countryside. Thereupon Lenin wrote a letter to the Petrograd workers in which he emphasised that it was "foolish and criminal" to sit in Petrograd and go without food at empty factories. Class-conscious workers could overcome the kulaks who were fighting against Soviet power only by organising "a mass campaign into the rural districts".² He addressed his words primarily to the foremost workers, to those who would not succumb to bribery and the temptations of pilfering and could best of all rally the poor peasants around them.³

¹ V. I. Lenin, *Collected Works*, Vol. 27, p. 436.

² *Ibid.*, p. 536.

³ *Ibid.*, p. 390.

In May and June 1918, Lenin spoke at a number of meetings and conferences of Moscow workers explaining the tasks of the detachments that were dispatched to the countryside.

The workers of Kolomna sent a delegation to Lenin to tell him about the shortage of food in their town. Saying that they were right to have come with their grievances, Lenin asked: "But how many food detachments formed of workers have you detailed to lay in grain supplies?"

"We haven't sent anyone," was the reply.

"There you are, comrades," Lenin said, "that's what you should begin with. Grain will not come to you of its own accord, it has to be taken away from the kulaks by force."

In response to the Party's call thousands of workers joined the food detachments set up by the Administration of Food Army and the War and Food Board under the All-Russia Central Council of Trade Unions. Workers who were sent to the rural districts were briefed by the foremost propagandists and Party and Government leaders. Lenin and Sverdlov also spoke to the workers on many occasions.

In 1918, the first year of the activity of the food detachments, not less than 60,000 workers, mainly from Petrograd, Moscow, Ivano-vo-Voznesensk, Nizhni Novgorod, Tula and Yaroslavl, had made trips to the countryside. Many of them were Communists. Fifty per cent of the Petrograd workers who were sent to the countryside before the summer of 1918 were members of the Party.

The food detachment of the Petrograd Committee of the Russian Communist Party (Bolsheviks) consisting wholly of Bolsheviks was one of the first to leave for the countryside. Dedicated to the cause of the Revolution they were the first to set an example of efficiency by returning to Petrograd with 17 railway cars loaded with grain.

The expansion of the Civil War gave rise to fresh difficulties compelling the Soviet Government to undertake certain extraordinary political and economic measures which in their aggregate have gone down in history as war communism. By then the medium and a considerable portion of the small industrial enterprises were already nationalised and worked for the country's defence. Universal labour conscription was introduced. The slogan: "He who does not work, neither shall he eat", was being translated into reality: food

was rationed. But the most important element of war communism was the surplus food appropriation system.

In museums there are photographs taken during the Civil War showing long queues of hungry people and a morsel of bread which was virtually priceless in those days. The surplus food appropriation system helped to obtain grain for the people. Workers' detachments were again sent to the rural districts to help the state-food agencies operate the system.

It is impossible to say exactly how many workers participated in these detachments, for some would be disbanded upon fulfilling their mission, while others would go back for more grain. But it is known that in 1919 and 1920 not less than 70,000 workers were active in the countryside.

The workers played an important role in the state food agencies, 80 per cent of whose staff in 1919 were former proletarians. Here, too, the Party relied on workers' detachments.

Taking advantage of the brief respite which set in in the beginning of 1920, the Soviet Government transferred a part of the revolutionary armies to the status of workers' armies which played a prominent role in collecting grain and restoring the transport system, particularly in the Ukraine, the Urals Area and the Northern Caucasus. But workers' detachments still constituted the main force in the battle for food.

So long as the village Soviets had not yet become genuine organisations of revolutionary power, their functions were performed by the Committees of Poor Peasants. There were about 80,000 of them of which more than 30,000 were set up with the help of the food detachments. The workers who made up these detachments, agitators and organisers of the Soviets and Committees of the Poor Peasants guided Party activity in the rural areas.

Not all farmers were inclined to give their grain to feed people living in some far-off town. It was necessary to appeal to their conscience and to make them interested in giving up the grain by impressing upon them that this would benefit the peasants themselves.

It was up to the worker to explain to the peasant as one comrade would to another that those who were going without food were the same people who overthrew the rule of the tsar and the landowners so as to give the land to the peasants

and who were fighting arms in hand to defend the peasants against the counter-revolutionary forces who wanted to restore the old order. Hungry people were too weak to work and factories were closing down. This meant that the peasants would be unable to obtain essential commodities and the Red Army would be short of weapons with which to defend the workers' and peasants' power. What the restoration of the old order had in store for the people could be seen from the developments in areas temporarily under Kolchak's control.

Veteran worker Alexei Badayev, Party member since 1904 and a Bolshevik deputy of the Fourth State Duma, had a good knowledge of the people who made up the working class: he saw them at work, in revolutionary battles, in exile and when they were discharging their duties as heads of people's commissariats. Yet, he was filled with admiration for the workers who made up the food detachments, who upon leaving their factories swiftly became professional organisers daily speaking at peasants' meetings on the most diverse subjects. In a simple and informal manner they enlightened the peasants about the policy of the Bolsheviks and the measures they were carrying through. They distributed thousands of printed appeals and newspapers in the countryside. Wherever possible they organised libraries and reading rooms and talked to the peasants at their homes and at village gatherings.

A worker in the village was not only an agitator and a grain collector. He also guarded barns with grain and applied the laws of the dictatorship of the proletariat to the kulaks and profiteers. During harvesting he was on hand to help the peasants. In the autumn of 1918 and 1919, special harvesting and procurement detachments of workers were dispatched to the rural areas.

The majority of the workers were sent to Orel, Saratov, Tambov and other grain-producing gubernias. Later, in 1919 and 1920, they collected grain in the Ukraine, the Urals Area, Kazakhstan and Central Asia.

"Giving their lives in the fight for grain for the Ukrainian proletariat and the Ukrainian Red Army, the Moscow and Petrograd workers delivered exemplary object lessons of the unity of the revolutionary front of all the nations of the So-

viet republic." That was how Food Commissar of the Ukraine A. G. Schlichter described this heroic period in the history of the Soviet working class.

It was by no means all smooth going for the food detachments. Capitalising on the proprietary feelings of the peasants, the kulaks incited them to prevent the workers from enforcing the grain monopoly.

The workers that were sent to the rural areas were armed but they used their weapons only to defend themselves against the kulaks. In frontline regions, however, there were clashes with whiteguard elements.

Administrative measures were taken against the kulaks who refused to surrender surplus grain, but only moderate quantities of grain were requisitioned from the middle peasants with whom the workers tried to come to an agreement. No grain was taken from the poor peasants and whenever possible the workers helped them not only to organise, but also to obtain implements, seeds and very often, food.

The military and political alliance between the working class and the peasants which came into being during the Civil War rested on the following principle: Soviet power gave the peasants land and supported them against wealthy landowners. In exchange the peasants gave food to towns.

The leading role in this alliance was played by the working class. "One of the greatest and indefeasible accomplishments of the October Revolution—the Soviet revolution—is that the advanced worker, *as the leader of the poor, as the leader of the toiling masses of the countryside, as the builder of the state of the toilers*, has 'gone among the people'. Petrograd and other proletarian centres have given thousands upon thousands of their best workers to the countryside."¹

In Labour as in Battle Victory was forged everywhere: in the frontal attacks against the enemy, in bitter clashes for grain with the kulaks, and in factories where constantly underfed workers toiled with unflagging determination. Labour productivity was low, nevertheless, and it had to be raised. But how could this be achieved when any improvement of the equipment was com-

¹ V. I. Lenin, *Collected Works*, Vol. 27, pp. 397-98.

pletely out of the question. Even the available equipment was not utilised to full capacity. One way of solving this problem was by launching a drive for stricter discipline.

In those years a labour victory was not easily won not because there was a shortage of fuel, raw materials and food, but also because the personnel at factories was changing. When the Revolution began there were just under 3,000,000 factory workers. Almost 800,000 of them were fighting in the Civil War. About 180,000 of the best workers were killed in action and thousands of others were with the food detachments in the rural districts. From 10 to 15 per cent of the proletarians died from hunger and epidemics. As a result in August 1920, there were 1,700,000 workers in the republic. There was a permanent strata of veteran factory workers, who, as in the pre-revolutionary period comprised approximately 40 per cent of the total. Nevertheless, there was a constant shortage of qualified workers, and during the war the Government repeatedly ordered the release of highly qualified workers from the Red Army.

The Government's main concern was to overcome the shortage of workers at defence industry enterprises. The republic was proud that its Red Army was armed with weapons for the most part manufactured at the nationalised enterprises and that almost all its uniforms and boots were made in Soviet time. But all this was accomplished with great effort, in the fight against economic dislocation which posed a threat to the gains of the revolution. People worked without respite enduring extreme fatigue, hunger, cold and illness. In February 1919, Lenin received a cable from the Maltsev factories that workers were fainting at their benches and at troughs with molten iron and that some collapsed and died while at work. And yet, the cable went on, the workers were staunchly enduring hunger and "continued working". On Lenin's orders supplies were promptly delivered to the factories and the workers responded by still further increasing the output of metal.

The workers at other key enterprises also made every effort to augment the output of products essential for the republic's defence.

When Denikin's troops went over to the offensive posters summoning the people to keep their spirits up, to shake off

their fatigue and to remember that the Revolution was still going on appeared in the streets.

Exhausted and hungry men and women squared their shoulders. They knew that the Revolution was in danger, and that it was up to the soldiers at the frontlines and the workers at the factories to safeguard it.

In October 1919, when Denikin's troops were standing at Tula, the town's workers dispatched volunteers to the front-line and in between their shifts at munition factories built defences on the town's outskirts. Speaking in Tula in September 1919, Mikhail Kalinin called upon the workers to increase the output of arms and munitions to the maximum. They promised that they would do their best to manufacture more rifles, machine guns and ammunition, and kept their word. In a single month, from August to September, they raised the output of machine guns from 595 to 690 and considerably increased the production of ammunition. When the Civil War ended the All-Russia Central Executive Committee awarded the Order of the Red Banner to the Tula munitions and armaments factories.

Out of the 4,500 workers employed at the Goujon Works only 800 remained at their jobs. The rest were either in the Red Army or in the villages collecting grain. Open-hearth furnaces stood idle, subterranean waters were seeping into the shops and there was no electricity, but the workers would not even consider the possibility of their factory going out of commission for ever. Skilled workers cleared the roofs of the factory buildings and the railway lines of the snow, and practically nursed the factory as they would a dangerously ill person.

With extraordinary determination the workers kept production going despite the acute shortage of raw materials, fuel and specialists. They worked ten and more hours a day when necessary and sometimes even used their own firewood to heat the factories.

In those days a great deal depended on the transport workers, for the railways were the nerve arteries of the economy. "If the trains stopped running," Lenin emphasised, "that would mean the end of the proletarian centres. Heroic efforts on the part of the masses of workers would be needed

to maintain transport and facilitate the struggle against hunger and cold."¹

In the middle of July 1920, some 6,000 Communists were sent to the aid of the transport workers. They were assigned to the most crucial sectors—locomotive depots, repair shops and railway junctions. Relying on the creative activity of the masses of workers the Communists led the drive for higher labour productivity.

Enthusiasm alone, however, could not sustain the high tempo of work of hundreds of thousands of workers. And so the Soviet Government introduced special rations for workers and bonuses in kind for those who overfulfilled their quotas or worked overtime. This stimulated the growth of labour productivity.

The headway in the rehabilitation of transport made things easier for other branches of the national economy.

As soon as the enemy was driven out of the Donets Basin, the miners launched an all-out drive for more coal. The Soviet Government took urgent steps to supply the miners with essential equipment, food, textiles and footwear. In April 1920, the average coal yield was 2.1 tons per worker. By the end of the year it had risen to 3.9 tons. Coal output in other parts of the country also increased.

Workers restoring the damaged enterprises were aided by their families. They cleared the rubble, searched for materials and equipment which could be put to use and gathered scrap metal. All worked with a will, knowing that they were hastening the hour of victory.

Reflected in the lives of the people were the great accomplishments of the working class in the Civil War, the spiritual flame which, to quote A. Lunacharsky, "hides under the drabness of proletarian life and bursts forth in the course of the workers' struggle".

One of the most striking manifestations of the new attitude to work were the communist *subbotniks* (voluntary work after working hours on Saturdays). The first was held in the spring of 1919 at one of the most dramatic and difficult periods in the life of the young Soviet state when Kolchak's armies were pushing towards the Volga. Sustaining heavy

¹ V. I. Lenin, *Collected Works*, Vol. 30, pp. 345-46.

losses in the fighting the Red Army urgently needed replenishments. But there was a shortage of locomotives and railway cars most of which were standing idle at numerous railway stations and required repairs.

The first *subbotnik* was organised by the workers of the Moscow Marshalling Yard of the Moscow-Kazan Railway who stayed after work and, without remuneration, repaired several locomotives overnight. Inspired by a feeling of revolutionary duty, they drove sleep and exhaustion away and worked with tremendous enthusiasm.

When the day broke a repaired locomotive steamed up to a troop train. Surprised and excited the sailors and the Red Guards rushed to the boxcars chalking "Death to Kolchak" on their sides. The train set off for the frontline and in the marshalling yard the participants in the first communist *subbotnik*, that was how they called this shift, munched salted brown bread washing it down with gulps of steaming water, and then sang the *Internationale*.

On May 7, there was a general Party meeting of the sub-district. There was only one point on the agenda: "The work of the Communists after working hours in view of the critical situation in the country". The resolution on the organisation of a mass *subbotnik* was passed unanimously by a show of hands.

Labour productivity at the *subbotnik* was 2.5 times higher than usual. "We worked with remarkable enthusiasm as a single organism," recalls one of the participants. "And when workers, office employees and railway officials, like industrious ants, rolled the huge rim of the wheel of a passenger locomotive into place, our hearts warmed with a feeling of joy for our collective labour filling us with confidence that no one and nothing would wrest the victory from the working class.

"After work all those present witnessed a stirring sight: a hundred Communists, tired but with a bright gleam in their eyes announced the end of a job well done with the solemn melody of the *Internationale*. It seemed that the strains of the victorious anthem would sweep over the walls and spread in waves throughout Moscow and would reach the remotest corners of Russia. . . ."

He was right, the wave of communist labour, rapidly swept across the country.

The example of the railway workers was emulated by metal and textile workers, miners and others, by Communists and non-Party people. Within a brief span of time hundreds of thousands of people were participating in *subbotniks*.

Lenin called the *subbotniks* a great beginning, a definition which better than any other conveyed the meaning and significance of this genuinely nation-wide movement. "It is the beginning," he wrote in June 1919, "of a revolution that is more difficult, more tangible, more radical and more decisive than the overthrow of the bourgeoisie, for it is a victory over our own conservatism, indiscipline, petty-bourgeois egoism, a victory over the habits left as a heritage to the worker and peasant by accursed capitalism."¹

Great masses of people took part in the all-Russia *subbotnik*. It was held on May Day, 1920. The country rose early from sleep. One could have taken it for an ordinary day if not for the red flags and streamers that decorated the streets of cities and the excitement that glowed on people's faces as they walked to the assembly points with spades, pickaxes and crowbars and then in columns proceeded to the designated places of work. All worked splendidly, putting their heart into their job.

On that day Lenin joined the Kremlin cadets who had organised a *subbotnik* to tidy up the territory of the Kremlin.

The all-Russia *subbotnik* stirred up a great wave of labour enthusiasm. Weeks of assistance to the army and transport, and other measures were organised, and it was not at all surprising that large numbers of people eagerly participated in them.

The workers were becoming the real masters of the Soviet republic. Mikhail Kalinin, a professional metalworker and tested Bolshevik, who in the first months after the Revolution was in charge of the Petrograd economy, became Chairman of the All-Russia Central Executive Committee in 1919. The inherent efficiency of this simple and warmhearted man enabled him quickly to size up the situation. Possessing the shrewdness of a peasant and a worker, Kalinin the statesman unfailingly displayed a practical approach to all matters.

¹ V. I. Lenin, *Collected Works*, Vol. 29, p. 411.

From the first months of the Revolution the workers were in complete control of the city Soviets, the state bodies of the dictatorship of the proletariat. The Yaroslavl City Soviet, for instance, was headed by watchmaker D. S. Zakheim and his assistant was V. L. Popov, a former worker from Petrograd. A. M. Dadukin, a textile worker, was in charge of the treasury, and the post of Labour Commissar in the Soviet was held by N. P. Kokhansky, an automobile factory worker. The housing and food department was under Kapionov, Okhapkin and Pryamkov, all workers at the Bolshaya Manufaktura Factory. It was a typical Soviet of a proletarian centre.

One of the members of the Presidium of the Supreme Economic Council was Jan Rudzutak, a Riga worker whose father was a Latvian farm labourer. In 1919, Jan Rudzutak was put in charge of the Water Transport Board. It was a time when many railways were cut by the enemy and waterways played a crucial role in keeping the country supplied with grain, coal and oil. Vlas Chubar, another member of the Presidium, was a former metalworker and factory committee activist. During the Civil War he headed the State Association of Engineering Factories and later supervised the rehabilitation of the Ukrainian industry. By 1920, workers comprised 57.2 per cent of the members of the Presidium of the Supreme Economic Council and the gubernia economic councils, 51.4 per cent of the board collegiums and 63.5 of factory administration staffs.

As the *Manifesto of the Communist Party* predicted, the proletariat after overthrowing the bourgeoisie became the ruling class. The developments of the first three years of the Revolution showed that after having overthrown tsarism the working class launched the socialisation of the means of production, showed the correct road to the vacillating elements and took steps to suppress the armed and covert resistance of the exploiters.

It is a fact that socialist relations of production cannot arise in the depths of the capitalist system. The slave-owning system, feudalism and capitalism that is, all forms of ownership which preceded socialism, appeared spontaneously, whereas socialism emerged as a result of the conscious activity of the people. This was the distinctive feature characterising the creation of a new society, and the working class was

the principal maker of history in the period of socialist revolution and the building of socialism. "The assumption that all 'working people' are equally capable of doing this work," Lenin wrote, "would be an empty phrase, or the illusion of an antediluvian, pre-Marxist socialist; for this ability does not come of itself, but grows historically and grows *only* out of the material conditions of large-scale capitalist production. This ability, at the beginning of the road from capitalism to socialism, is possessed by the proletariat *alone*."¹

It was the workers' objective position in society that determined their characteristic features: the ability to put class interests above the interests of groups and individuals, their unfailing capacity to undergo sacrifices for the sake of the Revolution, their conscious discipline, remarkable industriousness and striving to attain the heights of culture.

The first three years, the assumption of power and the Civil War were only the beginning of the heroic road of the Soviet working class. Having emerged from the depths of the bourgeois society and constantly encountering the remnants of the old mode of life, the workers did not shed their "petty-bourgeois prejudices at one stroke, by a miracle...". They did so "only in the course of a long and difficult mass struggle against mass petty-bourgeois influences".²

Nevertheless, already at the time the working class began acquiring new class features which subsequently moulded its psychology: the workers realised that they were the masters of the country and began to develop a new, communist attitude to labour.

Under the Banner of
Proletarian
Internationalism

In the evening of March 21, 1919, the Moscow radio station received call signals from Budapest.

They came as a surprise, for at the time not a single European country maintained radio communications with Moscow. In a moment, however, everything became clear: Budapest informed that Hungarian workers and peasants had taken power into their hands and proclaimed the establishment of a Soviet republic in the coun-

¹ V. I. Lenin, *Collected Works*, Vol. 29, p. 421.

² *Ibid.*, Vol. 31, p. 115.

try. Developments in Hungary showed that flames of a world revolution ignited by the October Revolution in Russia were spreading.

On April 19, 1919, workers in Bavaria set up Soviet power. Guided by the Communists the Berlin workers mounted a struggle against the bourgeoisie. Following the example of the proletariat of the European countries, the multimillion masses in the East were moving into vigorous political activity.

The heroic struggle of the workers of Russia inspired the working people throughout the world to fight for their liberation from the capitalist yoke. Soviet Russia became a symbol of victory for workers and peasants in other countries. And when the forces of the old and the new in Russia clashed in a life-and-death struggle, the foremost representatives of the international proletariat took up arms and joined the ranks of Russian workers and peasants.

During the Civil War tens of thousands of foreign workers fought shoulder to shoulder with the peoples of Soviet Russia for the freedom of Russia. Though foreigners made up a small percentage of the Red Armymen, the atmosphere of proletarian internationalism which their presence created, and their preparedness to give their lives for the world's first state of working people, were factors of no small importance.

In the spring of 1918, international detachments jointly with Red Army units conducted operations against the counter-revolutionary forces on the Don. The troops under Sergei Lazo who were fighting east of Lake Baikal included the Omsk 1st and 2nd International Proletarian Detachments. In April 1918, an international detachment raised in Samara out of former German, Austrian and Hungarian prisoners of war was dispatched to the front.

The Czechoslovak 1st Revolutionary Regiment acted with great courage against the White Czechs.

Units made up of Chinese, Koreans, Finns, Hungarians, Czechs and other nationalities fought side by side with the Red Army during the grim days of Kolchak's offensive. Red Armymen-internationalists covered themselves with undying glory in the battles against the armies of Denikin and Wrangel.

In their turn Russian workers and peasants took part in the liberation struggle waged by the working people of other countries. Russian soldiers who were taken prisoner during the First World War participated in the revolutionary events in Germany and Hungary in 1918 and 1919. Russian workers and peasants joined international detachments and fought for a better life of the fraternal peoples. Russian soldiers, who were with the 3rd Division of the Hungarian Red Army, displayed great courage and determination in battle. "The Russian Battalion," wrote the divisional commander in his report, "in view of its successful actions is worthy of merit. Moreover, I should like to have the following information published in the newspapers: 'Waging incessant battles since May 29, the Russian First International Battalion, 1st Regiment, crushed the stubborn resistance of the enemy. In the Szakali sector and at Alsostregova it continued to advance in the designated direction despite heavy losses and in the face of superior enemy forces...'" The peoples of Soviet Russia rendered the Hungarian Soviet Republic great moral and political support in 1919 when it was locked in bitter battles with the counter-revolutionary forces. All this was vivid manifestation of proletarian internationalism.

In those years ocean liners, which were to transport weapons to the whiteguards and the interventionists, stood idle in many European and American ports unable to leave for their destination because port workers refused to load them. In July 1919, Italian sailors prevented a British ship bound for Vladivostok with a consignment of arms for Kolchak's army from leaving the port of Naples. Göteborg and Seattle dockers and workers in other countries did the same. In Britain the miners', transport workers' and railwaymen's trade unions bombarded the British Government with resolutions demanding to end the interference into Russian affairs, lift the blockade and cease supporting the Russian counter-revolution. And when it became clear that the Government would not concede, the workers declared that the time for resolutions had passed and that the hour for decisive action had arrived.

In January 1919, a strike movement in protest against the intervention developed in Britain. A hundred thousand Glasgow dockers, shipbuilders, electricians and miners held a

strike on January 28. Mass demonstrations took place in London and other major cities. In the summer of 1919, the country was hit by a fresh wave of strikes. On June 21, an estimated 500,000 textile workers struck in Lancashire and shortly afterwards the entire textile industry of Britain went on strike. Railwaymen declared a strike at the same time. They refused to transport armaments, equipment and troops which were to be used against Soviet Russia.

In France the general strike of the 300,000 metalworkers of the Paris district lasted from June 2 to 30, 1919. Besides economic demands the strikers demanded that the Government should immediately put a stop to the intervention in Soviet Russia.

A great deal was done to spread anti-imperialist ideas among foreign soldiers and sailors and awaken in them a sense of proletarian internationalism by the foreign Communists united in the Central Federation of Foreign Groups of the RCP(B) under the Party Central Committee. The prominent Hungarian revolutionary Béla Kun was Chairman of the Federation.

Extensive agitation work among the interventionist forces in the south was conducted by the Foreign Propaganda Collegium set up by the Odessa underground Regional Committee of the Ukrainian Communist Party (Bolsheviks). The chairman of the collegium was I. F. Smirnov, a former Kiev worker, and its membership included typesetter V. Degot, workers A. Vinnitsky and M. Shtilivker (Michel), tailor A. Vapelnik, the Rumanian revolutionary A. Zalic and the French Communist Jeanne Labourbe.

In 1920, when British, French and American ruling circles moved the armies of bourgeois-landlord Poland and Wrangel against the Soviet republic, the international proletariat rose to its defence with still greater determination.

The working people of Europe turned the May Day celebrations into a demonstration of solidarity with the Soviet people. On that day eight million workers staged a strike in Britain alone. In London demonstrators marched past the Polish Mission with shouts "Long Live the Soviet Republic!", "Down with Capitalism!".

There were mass demonstrations and strikes in France, Italy, Belgium and Germany. In Warsaw workers marched

in columns with posters reading "Long Live Soviet Russia!", "Long Live Soviet Ukraine!".

When the Polish whiteguards attacked the Soviet republic the German working class found itself in one of the most crucial sectors of the international anti-imperialist front. Military freight from Britain and France reached Poland through Germany and the German workers led by the Communist Party set themselves the task of preventing its transit through their country. Member of the Erfurt Control Committee, Otto Kühne, later recalled how German railwaymen opened the crates with weapons, damaged them and packed them up again. "In the waybill," Kühne related, "I would write: 'Contents checked. All as stated. Member of Production Council, Kühne.'"

In May 1920, London dockers headed by one of the founders of the Communist Party of Great Britain Harry Pollitt, refused to load the *Jolly George* with arms and ammunition for the whiteguard Polish Army. Newspapers reported that no one even came close to the ship. The dockers decided to throw the coal in the ship's bunkers overboard to prevent it from taking on the arms consignment in another port. On July 23, 1920, Danzig dockers would not unload the *Triton* which arrived from Britain with military equipment for the Polish militarists. The reactionary rulers of Poland promised 15 marks and six kilos of flour a day to each worker who would take part in unloading the ship. But even this "generous" offer had no effect. The starving Danzig dockers would not be bribed into breaking their international solidarity with the workers of Russia. And when an attempt was made to bring in workers from Poland, the Danzig dockers declared that they would stop all work if anyone would try to unload the ship. The *Triton* left Danzig with its cargo still on board.

That was how workers in Europe and America protested against the plans of the imperialist governments to strangle Soviet Russia. In period from 1918 to 1920, the slogan "Hands off Russia" was a rallying call for working people in all parts of the world. Workers in European, American and Asian cities organised meetings and demonstrations in support of Soviet Russia and took part in strikes in protest against the intervention. British, French and Italian workers

refused to manufacture military equipment which could be used against the Soviet republic.

The ideas of proletarian internationalism began to spread among the occupation forces. Foreign troops who had been sent to Russia refused to fight against Russian workers and peasants. There were revolutionary disturbances in British, American, Rumanian and other military units and although they were put down the interventionists were forced to pull their forces out of Russia. "The victory we won in compelling the evacuation of the British and French troops was the greatest of our victories over the Entente countries. We deprived them of their soldiers. Our response to the unlimited military and technical superiority of the Entente countries was to deprive them of it through the solidarity of the working people against the imperialist governments."¹

The successes of the workers of Russia in their courageous fight for the freedom and independence of their Soviet homeland inspired their class brothers in other countries.

In 1920, Norwegian workers gave a most cordial welcome to the first delegation of Soviet workers and miners to visit their country. It was also received with exceptional warmth by the workers of Germany. Workers' organisations in Bulgaria and other Balkan countries gave a fraternal welcome to Soviet trade union delegations.

The Danish Metalworkers Union wrote to their Soviet comrades: "The eyes of the whole world are focussed on Russia as the creator of a new world epoch. We know that you are the centre the capitalists of the world and their agents are smearing with filth and lies. But a people which succeeded in throwing off the yoke of slavery matured in the course of long years of privations, and no other people could have been the first to undermine the system of capitalism. Only your own strength and endurance could surmount all obstacles.

"Your enemy is our enemy, your victory is our victory."

For the Good of the Working People "The primary task in a ruined country is to save the working people," Lenin said in 1919. "The primary productive force of human society as a whole is the

¹ V. I. Lenin, *Collected Works*, Vol. 30, p. 211.

workers, the working people. If they survive, we shall save and restore everything."¹

For many months hunger besieged workers' families. In 1918, Moscow and Petrograd workers quite often received 50 grammes of bread for two days. Sugar, butter and meat were a rarity. In 1919, the food situation improved a little but was still far short of satisfying the most elementary requirements. In the first six months of the year machine builders in Kolomna, Bryansk, Sormovo and Tver received on an average 188 grammes of bread a day. In April 1919, each member of a worker's family was issued a daily ration of 216 grammes of bread, and 124 grammes in June.

In 1919 and 1920, workers' wages, including unaccounted-for incomes, ranged from 8.47 to 8.3 commodity rubles, and were lower than prior to the First World War. During the Civil War payments in kind made up an ever increasing portion of the wages. They were distributed without consideration for the skill of the workers and the amount of work done and were a means of saving them from a hungry death. Money wages were paid out depending on labour productivity. But in those years money steadily declined in real value. People had to sell their belongings and many workers made and sold cigarette lighters and other small necessities, so as not to die from starvation.

The Government was unable to provide the people with more than what could be described as a starvation subsistence minimum. To satisfy the requirements of the working people it was necessary to develop the productive forces and the resources which were available to society. But these resources were dwindling due to the economic dislocation caused by the actions of international imperialism and counter-revolutionary bourgeoisie of Russia.

In conditions of a bitter struggle on the front and an acute shortage of the most essential necessities the Party and the Government did their utmost to improve the position of the workers and their families.

It was inevitable that in pre-revolutionary Russia the housing conditions of the workers were abominable. They and

¹ Ibid., Vol. 29, p. 364.

their families lived in basements, rented beds in flats or lodged in barely furnished factory-owned barracks.

Immediately after the October Revolution the Soviet Government carried through what was called the redistribution of housing. On October 8, 1917, Lenin drew up the draft of the law "On the Requisitioning of Flats Belonging to the Wealthy to Ease the Position of the Poor". Thus began the "great resettlement" of the working people. Bourgeois families were ordered to give up a part of their accommodations in favour of those who were in need of housing.

Textile workers, metalworkers, tramcar drivers and builders moved into old aristocratic mansions, apartment buildings and rooming houses. The strata of workers in the central part of Moscow and in many other cities increased tenfold. The rent was insignificant. In fact it was only one-fifteenth of the rent in pre-revolutionary Russia.

In those days a new form of providing workers with comfortable housing was introduced: the establishment of houses-communes tenanted exclusively by workers from a single enterprise. Operated by the factory administration or the factory committee these houses improved the workers' housing conditions. They also received priority as regards the setting up of kindergartens, crèches and clubs, and the Government supplied them with furniture, fuel, carried out repairs, and so forth.

The biggest, Red Army, rations were issued to munitions industry workers. Free meals were organised for workers performing the most arduous jobs. For the first time kindergartens, crèches, sanatoriums and rest homes became available to workers' families.

But not only concern for their daily bread filled the lives of the working people. They yearned for knowledge of which they were deprived for centuries due to oppression and back-breaking slave labour, and the Soviet state did everything to help them.

The children of workers and peasants could now attend the free and universal Soviet school, and the doors of higher educational institutions were flung open to young workers. On August 2, 1918, the Council of People's Commissars abolished all the formerly existing restrictions barring certain sections of the population from universities and colleges.

Workers and the poor peasants were granted stipends and hostel accommodation. Courses were organised in the autumn of the same year for preparing young workers for entering institutions of higher learning. On the initiative of the workers Workers' Faculties were established on the basis of these courses. By the end of 1919, a little over than 2,000 students were enrolled at these faculties. A year later their number had risen to 17,000.

The urge for education was great. At the time only 64 per cent of the workers could read and write. Literacy was the highest (over 80 per cent) among the workers of the engineering and the printing and publishing industry, while more than a third of the workers of the textile and food industry could neither read nor write. That was why a large number of workers enrolled at schools and study groups and circles for the liquidation of illiteracy which were opened in the country.

The first factory apprenticeship schools were opened at the end of 1918 and the beginning of 1919.

The Commissariat for Education had a special committee to assist the technical and vocational training schools. By the autumn of 1920, an estimated 91,475 people were attending vocational schools and courses. The working day for juveniles was reduced to four hours to give them more time for study.

The Party did a great deal for the enlightenment of the workers. Libraries were opened in workers' clubs and factories and their number increased twofold from 1919 to 1920.

People flocked to the museums with their enormous riches of material and spiritual culture. The mansions of the nobility with their valuable collections of works of art were also turned into museums. New, working-class audiences, packed the halls of opera and drama theatres. The country's most celebrated singers, actors and dancers performed in workers' districts and at factories.

Interest in spiritual culture increased tremendously, and life was changing radically.

ECONOMIC REHABILITATION (1921-1925)

The First Steps Towards the Restoration of Industry

On January 1, 1921, the newspaper *Pravda* carried articles on the demobilisation from the Red Army, about the economic management reform and the operation of individual enterprises, and its editorial said: "We are not wishing our comrades in the Party an unclouded petty-bourgeois happiness. We are wishing them and the Party successes in construction. Let us ensure 100 per cent fulfilment of our production programme!—that is the New Year watchword which we are advancing as the year 1920 vanishes for ever."

The country was entering the long-awaited period of peaceful development.

And although Menshevik leaders remained in power in Georgia for another two months or so, and in the Far East the whiteguards and the Japanese interventionists continued to commit outrages almost until the end of 1922, the period of the Civil War was over in the main. A long time would pass before the imperialists of Europe and America would be forced to recognise the Soviet state; Washington would do so later than all others, only on the sixteenth year of the existence of the proletarian dictatorship. Nevertheless, it was in 1921 that the peaceful coexistence of two social systems became an historical fact.

The Bolsheviks had prepared in advance for the transition to peaceful construction. As early as in 1920, long before the last operational reports from the front were published, they

considered the problem of drawing up a single economic plan. Military units were converted into worker's units and launched the rehabilitation of the national economy.

In December 1920, the Eighth Congress of Soviets which convened in the Bolshoi Theatre in the hungry and unheated Moscow heard a report on the electrification of the country. A huge map of Soviet Russia dotted with numerous electric bulbs was displayed to the delegates. Each bulb indicated a new industrial centre and consequently yet another concentration of the working class, another bastion of the proletarian dictatorship.

"While we live in a small-peasant country," Lenin said in those days, "there is a firmer economic basis for capitalism in Russia than for communism."¹ Endorsed by the Congress, the GOELRO Plan (the State Plan for the Electrification of Russia) was designed to create a firm economic foundation essential for the victory of the socialist mode of life both in town and country.

In ten or fifteen years it was planned to increase the output of large-scale industry by almost twofold as compared with 1913. The plan envisaged priority development for the heavy industry, the construction of 30 large power stations, a sharp rise in labour productivity and a 20 per cent increase in the number of workers.

The Eighth Congress of Soviets called the GOELRO Plan "the first step in a great economic undertaking". Lenin regarded it as the Party's second programme indicating the ways of creating the material and technical basis of socialist society. "Only when the country has been electrified," he underscored, "and industry, agriculture and transport have been placed on the technical basis of modern large-scale industry, only then shall we be fully victorious."²

What force could carry through such striking changes in a state tormented by years of wars and blockades? Bourgeois economists considered that without foreign assistance, without a mass inflow of capital, it would be impossible to restore the country's economy. The English novelist G. H. Wells

¹ V. I. Lenin, *Collected Works*, Vol. 31, p. 516.

² Ibid.

who had foreseen great technological achievements including flights into outer space saw Russia only in the shadows. But the Bolshevik Party and Lenin, whom he called a "dreamer in the Kremlin", knew exactly who would rehabilitate the economy and turn Soviet Russia into a flourishing, mighty and happy country.

It was the working class who was to shoulder the main burden of solving this task, who was to be in the forefront of the peaceful offensive.

What was the actual strength of the working class in those years? The number of factory workers, the leading section of the working class, declined by almost 50 per cent during the Civil War and the foreign intervention.

A considerable proportion of the workers were in the armed forces: one out of every six Red Army men, and one out of every three or four of the naval personnel was a worker.

Many workers held high positions in the state apparatus or elected posts in Party and trade union bodies. At the end of 1920, industrial workers made up 61.5 per cent of the members of the Presidium of the Supreme Economic Council, gubernia economic councils, the chief collegiums of various industries and factory administrations.

Needless to say, the enlistment into the armed forces and the transfer of experienced workers from factories to direct management of state and public activity by no means weakened the dictatorship of the proletariat.

Years of economic dislocation, constant undernourishment, the war and epidemics took the lives of a large number of workers. Poverty and hunger were no longer spectres. They became a part of the lives of millions of people.

Hundreds of enterprises closed down due to the acute shortage of fuel, raw materials and electricity. Large numbers of people left for the countryside in the search for food for their families. Money had long since become worthless. Monthly wages amounted to millions of rubles but were actually worth a few kopecks and could keep a family fed for three days a month. People depended wholly on state rations which were distributed free of charge from the end of 1920. Working clothes were also issued in exchange for coupons. And although industrial workers received bigger

rations than all the other categories of working people, their position was also extremely difficult.

Less and less people remained in industrial centres. Factories were at a standstill. The snow-covered streets of Moscow and Petrograd, where many houses stood with boarded doors and windows, were almost devoid of people.

By abandoning the idle enterprises, becoming handicraftsmen and migrating to villages, the workers broke away from the machine industry, from their material and psychological base. Work habits, the experience of political struggle and proletarian solidarity acquired in the course of many years were being relegated to oblivion. The workers were becoming declassed and their forces fragmented.

Another dangerous development was that many of the workers who were in the Red Army or were promoted to executive posts were replaced at their factories by members of bourgeois or landowner families, former merchants and tsarist officials. Some of them went to work at factories because industrial workers were exempted from military service, while others, concealing their social origin, hoped for the return of the old order. It was through these alien elements that petty-bourgeois influence seeped into the factories and mills.

The overwhelming majority of the workers in a splendid display of revolutionary staying-power and self-control supported the Communists and did their utmost to save production and bring the economic life back to normal.

Lenin stressed that socialism could not be built on enthusiasm alone. Not all workers shared this enthusiasm, and besides the steeled and tested workers there were also vacillating elements and undisguised self-seekers and money-grubbers.

The peasants' discontent with the food distribution system and the prohibition of free trade was making itself felt to an ever increasing degree. The individual peasant no longer feared the return of the landowner. The food distribution system made him no longer interested in ploughing more land, raising bigger harvests and expanding his farm. The inherent sense of private ownership stimulated his desire to dispense of the surplus food as he thought fit. The military-political alliance of the workers and peasants was

falling short of its mark, all the more so since towns were unable to provide the countryside with essential commodities.

The protest against the continuation of the policy which was engendered by the extraordinary conditions of war communism resulted in serious clashes in some parts of the country. Banditry increased, kulaks and the whiteguards raised their heads and the Socialist-Revolutionaries and Mensheviks stepped up their activity.

There was alarming news from the provinces. In Tambov Gubernia kulak uprisings led by the Socialist-Revolutionary Antonov, initially supported by a part of the peasants, assumed considerable proportions. They had to be put down by regular Red Army units.

At the end of February 1921, a mutiny flared up in Kronstadt on the Baltic. News of an anti-Soviet mutiny next to revolutionary Petrograd came as a shock to many people. How could it have happened that the sailors, those legendary heroes of the October Revolution, could have supported the counter-revolution? Why did they follow the lead of a former tsarist general and responded to the false slogan "Soviets without Communists"?

It was clear that the mutiny was organised by the Mensheviks and the Socialist-Revolutionaries. They took advantage of the fact that the Bolsheviks of Kronstadt sent the best members of the Party and the most politically conscious part of the sailors to the frontlines and that the new replenishments lacked the necessary ideological training and political experience. Many of the sailors were of peasant stock and were dissatisfied with the food distribution system. Nevertheless the organisers of the mutiny did not dare to appeal for the overthrow of Soviet power even to the politically less mature sections of the sailors and camouflaged their counter-revolutionary demagoguery under the false slogan of "Soviets without Communists". Signs of discontent appeared in the cities, too. The food distribution system was criticised by the workers who were suffering from the shortage of agricultural products and the disruption of the commodity exchange between town and country. The indignation of the workers acquired acute forms as could be judged by what they said, for example at the non-Party conferences which

took place at the beginning of 1921. On February 8, 1921, the *Pravda* carried report on the proceedings of a three-day meeting of representatives of the metalworkers of Moscow and Moscow Gubernia. They disapproved of the policy of war communism, excessive centralism in the management of the national economy, and all were concerned about the coming sowing campaign.

Addressing the conference on February 4, Lenin outlined the difficulties confronting the country and said: "The working class has been exhausted by these three years, and this spring will be a very hard one for the peasants. But you help us with the sowing campaign—to sow all the fields—then we shall manage to overcome our difficulties."¹ He called for every possible effort to promote relations between town and country.

His speech created a tremendous impression. It was the first time since the Civil War that the Party through the lips of the leader proclaimed: "Let us review the relations between the workers and the peasants."² A conference of metalworkers adopted a resolution which said: "It will be acknowledged that the present form of receiving the products of the peasants' labour through the food distribution system is inexpedient, since, by causing the deterioration and collapse of agriculture it not only does not correspond to the interests of the peasant masses, but also has a detrimental impact on the position of the masses of workers."

The transition from war to peace in the specific conditions of the period entailed much greater difficulties than anticipated. The shortage of fuel and food surpassed all expectations. Instead of expanding production it became necessary to close down another large group of enterprises. In the circumstances it was clear that the drive to rehabilitate the economy should be inaugurated by steps designed to stimulate the productive forces in the rural districts. Life itself dictated the need to replace the system of war communism with other measures. And at the meeting of the Politbureau on February 8, 1921, Lenin drew up a preliminary outline of the theses which became the foundation of the draft deci-

¹ V. I. Lenin, *Collected Works*, Vol. 31, p. 111.

² *Ibid.*, p. 110.

sion of the Tenth Party Congress held in March 1921 on the replacement of the surplus-requisitioning system by a tax in kind.

Since then many scientific and popular books have been written about the substance and the historical significance of the New Economic Policy or NEP (this term was introduced in May 1921 after the Tenth Party Conference). They explain why it was necessary to introduce the tax in kind and free trade, to lease small enterprises and temporarily encourage the initiative of the proprietors. In those years, however, very many people were unable immediately to grasp the meaning and the direction of the turn.

At the Tenth Congress Lenin received numerous notes whose authors were worried that NEP would lead to the re-establishment of capitalism. "You are flinging the doors wide open for the development of the bourgeoisie, small-scale industry and the growth of capitalist relations." "How will you be able to preserve the workers' state with capitalism developing in the villages?", and so forth.

To a degree the workers also succumbed to a feeling of depression. Many simply could not understand what was taking place: dictatorship of the proletariat and suddenly...

Private cafés, restaurants and small and big shops mushroomed at an amazing speed. "Proprietors" who, it had seemed, had disappeared for ever, sought permits to open "their own" shops and factories. And all this was taking place in conditions of continuing economic dislocation, hunger, unemployment and the homelessness of large numbers of children.

In 1922, the number of nepmen increased to a still greater extent and a year later there were 420,000 registered private traders in the country. A special census revealed that in 1923 approximately one-eighth of the country's workers had jobs at private enterprises. Compared with the period preceding NEP the contrast was striking, for at the time private trade was banned and the exploitation of workers categorically prohibited. The growth of capitalist elements was naturally viewed with apprehension by the working people.

The invigorated activity of the capitalist elements revived

the hopes of the white émigré circles of seeing the collapse of Bolshevism and the Soviets. Some sections of the bourgeois intelligentsia both abroad and inside the country became confident that NEP would gradually lead to the restoration of the old order. Such sentiments even found their way into the newspapers.

Lenin compared the turn towards NEP with a transition from a frontal attack on capitalism to its siege. This, of course, could not be carried out painlessly, and, as Lenin put it, called forth "complaints, lamentations, despondency and indignation among some people".¹ Some people even resigned from the RCP(B).

In the opinion of the opportunists NEP was nothing more than a retreat towards capitalism; the Trotskyites held that only the victory of socialist revolution in Europe could save the dictatorship of the proletariat in Soviet Russia; and the "Workers' Opposition" accused the Party of peasant deviation.

But the hopes of the bourgeois specialists and like-minded persons in the White émigré circles were dashed. The predictions of the factional groups did not materialise. None of them understood the essence of the historic turn accomplished under the Party's guidance. The tax in kind, free trade and commodity-money relations were carried into effect within the framework of the proletarian state. Large-scale industry, land, banks and railways remained the property of the Soviet people. The danger lay not in the growth of small-scale capital, but in the lingering hunger and poverty that were draining the working class of its strength and preventing it from performing its vanguard role of the predominant force of the Revolution.

The concession to the small-scale commodity producers was designed to strengthen and develop the economic stimuli of economic upbuilding. It was a retreat, a step back, which made it possible to concentrate forces for a subsequent offensive. "The essence of this retreat," Lenin underlined, "is a union with the peasant economy, the satisfaction of its urgent economic requirements, the creation of a firm economic alliance, the growth of the productive forces in

¹ V. I. Lenin. *Collected Works*, Vol. 33, p. 93.

the first place and the REHABILITATION OF LARGE-SCALE INDUSTRY."¹

Yes, it was the rehabilitation of large-scale industry on which the leader of the proletarian revolution concentrated his attention when he posed the question of what should be the principal task of socialist construction. The transition to NEP did not alter the single state economic plan and did not transcend its limits. Only the approach to the realisation of the GOELRO Plan was modified. The Party continued to hold that the sole and the most effective foundation for the creation of socialist society was machine production, large-scale industry, lacking which it would have been impossible rapidly to boost the entire economy and to promote the development of proletarian class-consciousness.

Lenin elaborated on these ideas at the Tenth Party Conference. He explained the character of NEP, the historically justified transition to this policy and its class orientation. "Its (proletariat's—*Ed.*) basic and most vital interests are bound up with the rehabilitation of large-scale industry as a solid economic foundation," he emphasised. "When that is done, it will consolidate its dictatorship, it will be sure to carry its dictatorship to success, in the teeth of all the political and military difficulties."²

The Party, the working class and the toiling peasantry followed Lenin's path. The years 1921-25 have gone down in the history of the Soviet state as a period of the rehabilitation of industry and the entire national economy.

The Consolidation of the Working Class

In 1921, the Party transferred I. R. Burdachev, a fitter at the Bromley Works, to an administrative post as its special representative at the Goujon Works. He set out for his new place of work with a feeling of excitement. But when he saw the heaps of rusty scrap metal and the empty grey factory buildings he was shocked beyond words. What struck him particularly was a stream that flowed past the shops. Its water was clear and fresh as though it flowed through meadows and fields and not next to an iron and steel plant with its flaming furnaces.

¹ *Lenin Miscellany XXIII*, Russ. ed., p. 287.

² V. I. Lenin, *Collected Works*, Vol. 32, p. 410.

Indeed, there were neither flames nor metal. The works was standing idle.

Hundreds of big industrial enterprises in Moscow, Petrograd, the Donets Basin, the Urals Area, Baku and other regions were in a similar state. Without special subsidies and additional outlays there could be no talk of rehabilitating the industry. The shortage of funds, fuel, raw materials and tools dictated only one way out of the situation: to concentrate the available resources first and foremost on such sectors of production without which ensuing economic development would be impossible and which would yield the maximum effect within the shortest possible time.

What had to be done now was to determine which factories and mines should get top priority. Addressing the State Planning Commission G. M. Krzhizhanovsky said: "We know that we are short of resources and we say: 'Let us single out the most viable enterprises.' But if we were given proof that the most viable are small, semi-artisan factories, it would not resolve the problem of what to include into the state programme."

In September 1921, the Government stopped issuing rations to all but the Red Army and Navy, workers and employees of state institutions and enterprises, transport workers and also disabled dependants, invalids and students. The rest of the population, including workers, had to fend for themselves.

At first from three to three and a half million workers of the large-scale industry were included into the state programme and that meant they were entitled to state food rations. But shortly, in view of the food shortage, only heavy industry workers were retained on the state food supply list; all those who were employed at consumer-goods factories, including workers of the textile, footwear and printing and publishing industries, were excluded.

In other words, even in the most difficult period the Party and the Government displayed special concern for the workers producing the means of production. This was absolutely justified, for if the heavy industry were not saved the Soviet republic would have been unable to exist as an independent state.

Steps were also taken to reorganise the management of industry with the view to extending the rights of the local Soviets, and Party and trade union organisations.

The Party assigned its leading members to key economic posts. Established at the beginning of 1921, the State Planning Commission was headed by G. M. Krzhizhanovsky. Head of the All-Russia Extraordinary Commission F. E. Dzerzhinsky was also People's Commissar of the Railways. V. V. Kuibyshev, member of the Presidium of the Supreme Economic Council, was simultaneously in charge of the Central Electricity Administration. J. E. Rudzutak who at first supervised economic rehabilitation in Turkestan was later elected General Secretary of the All-Russia Central Council of Trade Unions. V. Y. Chubar was director of the Donets Basin coal industry and then Chairman of the Economic Council of the Ukrainian Soviet Socialist Republic. There were also many other economic experts and outstanding organisers including V. I. Mezhlauk, V. P. Nogin, A. P. Serbrovsky and M. L. Rukhimovich.

The efficiently and swiftly conducted regrouping produced tangible results. The position of the peasants began to improve and the 1921 spring sowing campaign was carried out with enthusiasm. The sown area was enlarged and the cottage industry developed. Even the terrible drought that struck the country did not halt the general economic revival. In the 1920/21 economic year¹, the countryside fulfilled 67 per cent of the state food plan and 96 per cent in 1921/22.

On the whole, however, the food situation in the cities remained tense, for it had still proved impossible to lay in adequate food stocks. But the outlook for the future was brighter and the workers were beginning to feel more confident that things would take a turn for the better.

In the 1921/22 economic year, according to the estimates of the State Planning Commission, those categories of workers who were entitled to state food rations were to get approximately 530 grammes of flour, about 70 grammes of

¹ Up to January 1, 1931, the economic year (sometimes it was called operational year) commenced on October 1, as distinct from the calendar year. Annual plans and reports were drawn up accordingly.

cereals, under 30 grammes of meat and 20 grammes of sugar per day.

On top of that there were plans to augment these rations with three eggs, eight bottles of milk and approximately 500 grammes of salt a month. In effect, however, there was not enough food to ensure such a diet and the rations were much smaller. As before, there were days when the proletarians of Moscow and Petrograd received not more than 100 grammes of bread.

The Danish novelist Martin Andersen Nexø who visited Soviet Russia in 1921 obtained a good idea of the difficulties which the country's working class was experiencing then. Shortly upon returning home he set forth his impressions in a book which contained the following lines: "The old world boasted that by analysis it even penetrated the secret of the sun and the stars and could determine their weight down to the last pound. But then it did not bother to weigh bread for the hungry. Revolution means a complete reassessment of the world. The proletarian has overturned all phenomena in the human imagination and showed the people their tasks and the correct order in which they have to be fulfilled. His starting point was weighing bread; he has begun by doing that, but the day will come when he will reach the stars."

Today, when the whole world has heard of Yuri Gagarin, these words acquire a symbolic meaning, for the world's first sputniks, luniks and spaceships were built by people whose fathers lived on starvation rations in 1921, but who stood their ground and safeguarded the gains of the Revolution.

One by one key industrial enterprises went into operation again as a result of the priority attention which was given to the most important production projects. The fragmentation of the working class was coming to an end and it was entering a period of its consolidation.

Workers who returned to their factories wrote to their comrades looking for a better lot in villages in all parts of the country to follow suit.

As the food situation improved and production became more organised the flow of workers to industrial enterprises became more perceptible. But this was an uneven and at times a controversial process. There was a certain fall in

the number of workers even in the first six months of 1922. But already then another tendency was observed in a number of branches: there was an increase in the number of people working in the food and textile industries and in the chemical industry. In other industries, however, the number of workers continued to decrease, mainly as a result of the closure of non-paying factories which clearly held out no prospects for the coming year. Nevertheless, there was no doubt that a turning point would not be long in coming. At the beginning of 1922, the *Pravda* wrote: "Now it can be confidently said that the determination of the workers' masses to heighten labour productivity is indeed tremendous. On the other hand, it can also be regarded as proved that the workers' state is capable of organising the rehabilitation of industry." The successes were obvious: the decline in production was brought to a halt and industrial output rose 50 per cent in 1921/22.

The shrill cries of traders and smart cabs, night clubs and restaurants proved to be nothing more than scum on the surface of the powerful torrent of mounting economic activity. The main thing was to invigorate the peasant economy, revive the industry and put a stop to the declassing of the workers. Lenin correctly predicted that "every improvement in the state of large-scale production and the possibility of starting some large factories will strengthen the position of the proletariat to such an extent that there will be no need to fear the petty-bourgeois element, even if it is growing".¹

The confusion which had temporarily taken hold of a part of the workers in connection with the transition to the New Economic Policy, gradually gave way to a feeling of vigour and optimism characteristic of the revolutionary class.

The latter half of 1922 was marked by a general improvement in the economic situation. The lowest number of factory workers was registered on August 1. After that the number of workers both in the light and heavy industries began to rise rapidly.

In the five years of the rehabilitation period the number of workers increased twofold.

¹ V. I. Lenin, *Collected Works*, Vol. 32 p. 237.

The period of the "slackening of the rate of growth of new forces of the working class",¹ which, as Lenin had said, inevitably set in following the depletion of forces in the period from 1917 to 1921, was over. The overwhelming majority of the skilled workers who had gone to the countryside returned to the cities. In December 1925, the Fourteenth Party Congress noted the cohesion of the urban proletariat and underlined that the "difficult dire process of the declassing of the proletariat is now a thing of the past".²

At the time 97.5 per cent of the workers employed in the large-scale industry were employed at the enterprises comprising the socialist sector, the principal economic foundation of the dictatorship of the proletariat. By January 1, 1926, factories employing from 501 to 1,000 workers accounted for 12.9 per cent and enterprises with over 1,000 workers for 59.8 per cent of the total number of workers of the large-scale industry. Concentration of labour in the Soviet Union was much higher than in the United States.

Textile workers made up numerically the biggest detachment of the working class by the end of the rehabilitation period. Together with the sewing-industry workers, they numbered in 1924/25 over 586,000, or approximately 80 per cent as many as in 1914. The number of metalworkers was much smaller, only 262,100, or 76.4 per cent of the total in 1914. Then came the miners, workers of the food, metallurgical, chemical and other industries.

The composition of the industrial workers mirrored the level of the rehabilitation of production and the level of the country's industrial development. The number of workers of the textile, metalworking, chemical, mining and oil industries was the closest to the pre-war figure, and this mirrored the successes in the rehabilitation of these sectors. The iron and steel industry with its ore-supply base was lagging far behind. It had a long way to go to attain the 1914 production figures and the number of workers, 190,000 all told, it employed constituted 45.7 per cent of the 1914 total.

¹ Ibid., Vol. 33, p. 26.

² CPSU in Resolutions. . . , Russ. ed., Part II, p. 212.

Just as prior to the Revolution, most of the operating industrial enterprises were turning out consumer goods. Consequently the majority of the workers were employed in the light industry.

It stands to reason that no radical changes in the territorial distribution of the working class could have taken place during the rehabilitation period. As before, the bulk of the industry was concentrated in the Northwestern Area gravitating towards Petrograd, the Central Industrial Area (Moscow, Yaroslavl, Nizhni Novgorod and Tula), and the Donets Basin, Baku and the Urals Area. In 1926/27, an estimated 72.5 per cent of the industrial workers lived in the Russian Federation (of them 45 per cent were employed in the Moscow and Leningrad regions). About 23 per cent of the large-scale industry workers were in the Ukraine, 2.5 per cent in the Transcaucasian Federation uniting Azerbaijan, Armenia and Georgia, 1.3 per cent in Byelorussia, 0.7 per cent in Uzbekistan and 0.1 per cent in Turkmenia.

Economic development was the slowest in the Central Asian republics and Kazakhstan. The rehabilitation of industry in many parts of the Soviet East where its level of development was very low, dragged out until 1927 and 1928 due to age-old backwardness, the resistance of the *basmachis* and the feudal *bai* elements and other factors.

To intensify the efforts to overcome backwardness and consolidate the socialist basis of the proletarian revolution in these areas, the Party and the Government authorised the transfer of a part of industrial enterprises to the Central Asian republics, Kazakhstan and the Transcaucasus and the organisation of a network of special schools and courses for training workers of local nationalities. Moscow, Petrograd and Ivanovo-Voznesensk assisted fraternal Armenia with metal-cutting lathes and equipment for the textile industry. A fullery was transferred to Kutaisi. The Emba oil fields received pumps from Baku and Kolomna. Equipment for textile and paper mills, a tannery and a soap works was sent to Bukhara. Similar freight was dispatched to Kustanai and Uralsk.

Industrial centres sent personnel to help put the industrial enterprises into operation and train local workers. All these measures played an exceptionally important part in the life

of the peoples who had long been subjected to oppression by the tsarist authorities. The arrival of workers from Moscow, Petrograd, Ivanovo-Voznesensk, the Donets Basin and Baku manifested the essence of the Leninist nationalities policy and the internationalist nature of the proletarian dictatorship.

In view of the general difficulties of the rehabilitation period, however, this form of assistance could not be conducted on an extensive scale in the early twenties, and the workers constituted but a small proportion of the population in the border areas of the former tsarist Russia.

The uneven distribution of the vanguard forces of the proletarian revolution had a considerable impact on the course of socialist construction and on the life and activity of the working class itself. The local difficulties in many regions and republics were mainly due to the fact that the factory workers comprised but a small portion of their population. Simultaneously, the industrial workers of the central regions had to redouble their efforts to be able to render effective assistance to the formerly backward regions.

It should also be noted that by the end of the rehabilitation period factory workers (together with office workers) made up just over 25 per cent of the total number of industrial and office workers employed in the national economy of the USSR.¹ As the most highly organised force and vanguard of the proletarian dictatorship they had to lead all the other contingents of the working class, fuse them into a single whole and together with them draw the millions of Soviet peasants into the struggle for socialism.

Save the Working People The spring of 1921 was the grimmest in the history of Soviet Russia. The fearful famine caused by a drought worsened the position of the working people, particularly in the cities, to a still greater extent. Rations were not issued for weeks on end. There was no wheat and people ate oats. They searched

¹ In 1925/26, industrial and office workers employed in large-scale industry totalled 2,678,000; 2,007,000 people worked in agriculture, lumber industry and fisheries; transport workers numbered 1,299,000; builders—426,000, and small-scale industry workers and employees—427,000.

for acorns, edible roots and grasses to add to their food. The situation was especially grave in the Volga Area, the Southern Cis-Urals and Left-bank Ukraine. The workers of the Central Industrial Area also suffered from constant undernourishment.

Cables and letters with requests for assistance and not only in food, but in clothes, footwear, medicines and other items poured in by the hundred into government institutions. Only urgent, extraordinary measures could avert the catastrophe.

A wheat commission headed by Lenin was instituted in January 1921. In February, the Council of Labour and Defence assigned funds to purchase commodities abroad. The military administration was ordered to hand over their supplies to civilian organisations. In the spring all city Soviets and factories set up commissions for the improvement of the living conditions of the workers and their families and their decisions were obligatory. Workers in Moscow, Rostov-on-Don and Vladimir received meals in lunchrooms and were moved to well-ordered flats. Sewing shops were opened and building materials were found in warehouses with which to repair dwelling houses. Footwear, household utensils and furniture were issued to factory workers in Petrograd. The commissions in Omsk, Vladimir and the Northern Caucasus turned over plots of land, orchards and truck gardens to the workers. Measures were taken to ensure the normal functioning of bathhouses, barber's shops and medical institutions.

The commissions were dissolved in the spring of 1922. Under NEP extraordinary supply measures were gradually supplanted with other forms of distribution. The general living standard was changing, and, as industry continued to develop, the material incentive principle gradually came to the fore. But in the emergency situation of 1921 the free distribution of essential commodities played a tremendous role in bringing the life of the workers back to normal.

In January 1922, the *Pravda* wrote: "When you sit down to a meal remember those who are short of goosefoot to appease their hunger." Evacuation of people from the famine-stricken areas continued. The Commissariat for

Labour alone evacuated 100,000 workers and approximately as many members of their families from those parts of the country.

In February 1922, the All-Russia Central Executive Committee decreed the confiscation of church treasures and exchange them for food abroad. In response the reactionary clergy adopted an anti-Soviet stand, arousing the indignation of broad sections of the population. In a collective message to the Patriarch pious workers wrote: "Can we ignore the suffering of our brothers? Is it possible for us not extend a hand of assistance to them? Come to their assistance. Turn gold, silver and diamonds into bread and save the hungry from death." These words were written by people who had never taken part in public activity. How great then was the proletarian determination of the politically conscious, advanced sections of the working class. They were the Party's chief mainstay in the struggle to overcome the aftermath of the drought, crop failure and the devastation caused by the war.

"Let the entire working class rise as one man to heal the heavily wounded Volga Area, and the fertile Volga Area will in future years repay you with its bread,"¹ Lenin wrote. The working class responded. Each month all factory workers donated a day's earnings to help the famine-stricken population. The trade unions regularly conducted additional collections of funds, foodstuffs and other items. *Subbotniks* were organised more often and the money they yielded went to the relief fund. Moscow and Petrograd workers took thousands of children from the stricken areas into their families.

The situation eased somewhat in the summer of 1922. The tax in kind was collected fully and ahead of schedule and this tended directly to improve the material conditions of the workers. State and co-operative trade increased perceptibly, the private sector showed signs of increasing activity, markets rapidly returned to life in the towns, the purchasing power of the almost valueless ruble began to grow and the Government gradually curtailed the emission of old notes and began issuing *chervontsy* (ten-ruble bank notes) which

¹ *Lenin Miscellany XXXIV*, Russ. ed., p. 425.

had a stable gold basis. It was no longer necessary to pay the workers in kind.

The Soviet Government could not reconcile itself with the old way of things inherited from the past when the proletarians sold their labour to the capitalists and the value of this specific commodity was determined by the spontaneous laws of the bourgeois world. Jointly with the Commissariat for Labour and the All-Russia Central Council of Trade Unions, the Council of People's Commissars endeavoured to plan the improvement of the workers' standard of living. In the initial period of the rehabilitation the workers' wages were permitted to grow faster than did the productivity of labour. But this was a temporary measure, of course.

In the autumn of 1925, the real wages of workers in the large-scale industry amounted to 95.5 per cent of the wages in 1913. The sharp difference in the remuneration of male and female labour disappeared; in the 1925/26 fiscal year, the monthly wage of a metalworker was approximately 17 per cent higher than the average wage of an industrial worker, while the wage of a textile worker was 20 per cent below the average.

The following examples show what this meant in practice: K. M. Ryzhov, a worker of a Leningrad tube factory, with his wife and child each month consumed 40 pounds of rye bread, 40 pounds of wheat flour and 30 pounds of white bread, 30 pounds of meat, 10 pounds of vegetable oil and four pounds of butter. They spent almost no money on beer or wine, but expended almost twice as much on tobacco and matches as they did on vegetables.

Things were more difficult for the manual labourer Y. P. Shishkov. He earned less and had a larger family, consisting of himself, his wife and four children. Daily they bought five pounds of rye bread and baked white bread at home for which they required almost 80 pounds of wheat flour a month. In a month they consumed 15 pounds of meat, a pound of butter and ten pounds of sugar; potatoes and cabbage made up a large portion of their meals.

Here is how a skilled fitter whose family had still to return to Leningrad described his diet: "Either I have tea, cheese and butter for breakfast, or take a pound of white bread

and a quarter of a pound of sausage to work. For dinner I have cabbage soup with meat or ordinary soup. Usually I buy meat to last me two days and cook enough soup to last me the same period. My second course consists either of a quarter of a pound of mutton with fried potatoes or buckwheat porridge. Thus, counting the sausage, I eat a pound of meat a day. In the evening I eat either what has been left over from my dinner, or have tea with butter and cheese and sometimes a herring or a cucumber."

As can be seen the difference in the diets of workers of varying qualifications was large indeed. From the point of view of present-day norms the consumption of sugar and fats was inadequate. But the norms were different then. All those who suffered the appalling poverty and hunger of 1921, who saw people die from starvation, were happy to see the situation improve. The successes achieved inspired confidence in the future and enabled the people to get a better understanding of the causes that had engendered the difficulties which they endured. The best proof was life itself. Both the unskilled and skilled workers knew that in the mid-twenties they were having as much or even more food than prior to the Revolution.

Each year important modifications were introduced into the labour legislation, the public health and education systems were improved and housing construction gained greater scope. In 1925, the average paid holidays for workers were 14 days as against 5.8 days in 1920. People working in harmful conditions were entitled to additional benefits, and maternity leave of sixteen weeks (eight weeks before childbirth and eight weeks after childbirth) was granted to women.

Even in the difficult conditions of 1921 rest homes and sanatoria were opened for the workers. This was so unusual that it gave rise to amusing incidents. At first not a single worker at the Krasnaya Presnya Foundry would agree to avail himself of the holiday accommodations offered by the trade unions. After a week of persuasion veteran worker Bulychyev still refused spend his holidays in the south. "Let me die in Moscow," he kept on repeating. "I've never been on a train before, and I'm scared of it." He was virtually bundled into a south-bound train. And when he returned he

could not forget his paid leave and his free trip: "Just imagine, here I was a worker, holidaying like some prince..."

In 1923, it became possible for the first time to channel funds into the municipal economy, including extensive repairs of tramway lines, water mains, roads and pavements. The first standard flat was designed in 1925. It lacked a bathroom and had very small lockers. But it was clear to all that this was due to shortage of funds. That year the state built more than three million square metres of housing, or 50 per cent more than in the preceding two years. Housing construction, however, was considerably slower than the growth of the urban population. By 1926, there were two million people living in Moscow and 1.6 million in Leningrad, or twice as many as in 1920. The same happened in Khar'kov, Baku, Nizhni Novgorod, Ivanovo-Voznesensk and other industrial centres. Workers in the Donets Basin, the Urals Area and in the small towns around Moscow still lived in barracks, huddled in dugouts or rented ramshackle dwellings from the rural population.

Today not many people in Moscow, even the old-timers, know where Rakhmanovsky Lane is situated. But at the beginning of the twenties any youngster knew the way there, for that was where the Labour Exchange was located. Thousands of people went there every day in the hope of getting work.

The first signs of unemployment appeared in 1921, and at the beginning of the following year there were already 160,000 registered unemployed. A year later the number of jobless rose to 641,000 and by the middle of 1924 they totalled 1,344,000. The ideological opponents of Bolshevism regarded this as an indication of the restoration of the capitalist system. Actually, however, unemployment was caused by the fact that old Russia had been in the main an agrarian, small-peasant country. In the first half of the twenties, the small-scale technically backward economy of the individual owners was unable to provide employment for the entire able-bodied rural population. Specially conducted studies disclosed that in the 1924/25 fiscal year, a farmer worked on average 114 days in the field and spent 71 days on household jobs; on 35 other days he did all sorts of odd

jobs not connected with agriculture and during the remaining 145 days he had absolutely nothing to do. In other words, there was a tremendous reserve of labour power in the countryside, and just as was the case prior to 1917, there was a relative agrarian overpopulation in the country. Each year millions of people temporarily left the rural districts for cities, construction and timber-felling sites in the hope of finding work. A small number settled down in the industrial centres, but the majority returned to the countryside. So long as this reserve labour army continued to exist unemployment was bound to continue.

On top of that a large number of Red Army men were demobilised when the Civil War ended and the war-wrecked economy was unable to provide jobs for all this labour power. The ranks of the unemployed were swelled by workers whose factories and mines were temporarily inoperative. Members of bourgeois families who had lost their former sources of income were also looking for work.

A thorough analysis showed that in conditions of the planned restoration of the productive forces and the strengthening of the economy, socialism would eventually prove its advantages over capitalism by ensuring the right to work to all people. But what could be done in this respect at the beginning of the twenties?

At a trade union conference a group of delegates approached People's Commissar for Labour V. V. Schmidt. Among them were people with whom he had worked in the revolutionary underground which made him all the more surprised when they asked him to tell them about himself. "As you wish," he replied to what seemed to him a strange request. "I was born in 1886. That means that in 1917 I was over 31. My Party membership dates back to 1905. I am a professional metalworker, but since 1918 I have been holding the post of People's Commissar. Is there anything else?"

"Here is what I want to say," said one of the group. "You're a turner and so am I. You're a Bolshevik and I'm a Bolshevik. In 1917, we were together, too. Now you are a People's Commissar and I am unemployed."

What could Schmidt say in reply? No more direct questions were asked, but he felt the pain and bitterness of these

words and realised that it was terribly important to bolster the delegates' spirits.

Schmidt did not paint the future in rosy colours. He said that Communists were not entitled to any privileges in finding a job and added that no secret was made of the fact that there were Party members among the unemployed. The bulk of the unemployed, he went on, consisted of office workers, intellectuals and unskilled workers, and only a fifth were skilled industrial workers. Schmidt described the measures which the Government and the All-Russia Central Council of Trade Unions intended to carry out to help the unemployed.

Shortly afterwards Labour Exchanges were opened in the towns and from 1922 to 1925 only they were authorised to place people in jobs. The Labour Exchanges registered the unemployed and furnished material assistance to them. For six months after losing his job, a person was entitled to an unemployment benefit, coupons for free meals or meals at reduced prices and was exempt from taxes. First and foremost the state assisted the proletarian elements.

Other measures were also taken. For example, the trade unions of the food and sewing industry workers introduced a shortened working week so as to give employment to as many people as possible. Overtime work was prohibited and, as a rule, it was performed by the unemployed.

One of the most serious questions was that of assisting young workers. With the support of the trade unions special norms of discharging young workers were introduced. They took into account the age of the worker, his occupation and how harmful was his job. The Eleventh Party Congress stated clearly that "to keep young people in the sphere of production and safeguard them from extreme forms of exploitation which impairs them physically and morally, is essential for the further consolidation of the proletarian dictatorship and the development of the Soviet republic's industry..."¹

In 1922, the Council of People's Commissars issued a decree on the introduction of regular medical checkups for working juveniles. All workers under 18 years of age were

¹ CPSU in Resolutions... Russ. ed., Part I, p. 640.

to get a month-long holiday mainly in the summer. On the instructions from the All-Russia Central Council of Trade Unions and the Commissariat for Health Protection ten per cent of rest home and sanatoria accommodations were reserved for them. Other measures were taken to promote the correct education of the rising generation, to organise their work and lives, rest and study.

From 1921 to 1925, more than 4,000 enterprises of the large-scale industry became operational (not counting the small ones and numerous workshops, and so forth). The average annual number of workers came right up to the 1913 level, the last pre-war year. The reconstruction of the economy, which was gradually gaining momentum, demanded increasing numbers of workers trained in new professions, possessing higher skill and technical knowledge. On June 30, 1925, the *Pravda* reported that the industrial enterprises which the Supreme Economic Council planned to put into operation in 1926 alone, needed approximately 250,000 skilled workers trained in new professions. At the same time there were long queues at the Labour Exchanges in Moscow, Petrograd, Kharkov, Minsk, Tashkent and other cities.

People's Commissariat for Labour explained the causes engendering unemployment and its growth in this period. As industry developed and the economy gradually returned to normal the number of unemployed with specialities that were in short demand decreased; the number of industrial workers among the unemployed dwindled. On the other hand, there was a steady growth in the number of unskilled workers arriving in towns from the rural districts.

By the close of 1925, the bulk of the workers who had earlier left their jobs returned to their factories and other industrial enterprises. The Labour Exchanges could no longer satisfy the requirements of the factories in workers of needed professions. In order to encourage industrial development the Government decided to permit the industrial enterprises to take on any worker they needed and not only those registered at the Labour Exchange. Now a worker was given a job because he had the necessary skill and not because it was his turn to get one according to the Labour Exchange lists.

A great effort was still to be made in order to banish unemployment, launch the construction of modern enterprises and large cities, introduce universal primary and then seven-year education and organise the training of large numbers of teachers and medical workers. This task was not on the order of the day in the rehabilitation period. Above all it was of the utmost importance to save the working people and provide them with the essentials of life. And this task was successfully fulfilled.

**Consolidation of a
New Labour Discipline**

The Eighth All-Russia Congress of Soviets which was held at the end of 1920 expressed its firm conviction that braving all the hardships the workers and toiling peasants would make every effort to carry out the GOELRO Plan.

As should have been expected, the collectives of industrial enterprises were the first to respond. Mass *subbotniks* and *voskresniks* took place in Petrograd, Moscow, Kharkov, Ivanovo-Voznesensk, Baku and the Urals. A "Donets Basin Week" was organised in the Ukraine. In an effort to help the Donets Basin miners increase coal production, Petrograd workers sent them a trainload of clothes, and household utensils. Moscow dispatched a trainload of foodstuffs and the Kuban Area sent considerable quantities of grain, flour and meat. In their turn the front-rank Donets Basin miners undertook to increase coal output to help abolish the fuel shortage which was having a dire effect on the country's industrial centres.

Newspapers carried reports about the heroic efforts of the industrial workers, their mounting initiative and desire to rationalise their methods of work.

There are people in Leningrad today who still remember the memorable days when foreign ships first entered the port after a long interval. In May 1921, crowds watched the unloading of ships with coal, food and locomotives from Sweden. But their joy was marred when they saw that the unloading was done by hand. Cranes and other port facilities were rusty and in disrepair. Demurrage would have to be paid for in gold. It was the Putilov workers who came to the assistance. Working efficiently they quickly repaired the mechanisms.

Despite the doubts of the port workers, and to the surprise of all concerned the crane operators mastered their mechanisms and made 90 lifts on the very first day. On the second day they made 120 lifts. The planned work quotas were surpassed and the ships were unloaded ahead of the set time. The port workers received a premium of £150. But what was more important was the initiative of the port workers whose elation quickly spread throughout the city. That was what working for themselves, for their workers' state meant in practice.

In September 1921, I. I. Mezhlauk, Director of Yugostal Trust in the Donets Basin, arrived in Moscow and gave Lenin a detailed report of the plan to rehabilitate the Donets Basin industry. "How much money do you need to raise the southern metallurgical industry to its pre-war level?" Lenin inquired. Mezhlauk named an approximate sum and added that if it would be allotted the iron and steel workers would produce ten million poods of metal in 1922.

"It's a deal," Lenin replied. "Let's sign the terms. You will give me a promissory note, a communist promissory note."

Returning to the Donets Basin Mezhlauk presented Lenin's proposal to the workers who unanimously accepted it. On November 7, 1921, Mezhlauk signed a document which in effect became the prototype of the future socialist emulation commitments. Expressing the thoughts and aspirations of several workers' collectives it was their concrete commitment to the leader of the proletarian state. It was the first "promissory note" of its kind in history. Displaying unparalleled labour enthusiasm the miners fulfilled their pledge three months ahead of the set time.

In peacetime conditions the need for *subbotniks* and *voskresniks* declined as the shortage of labour power was overcome and the role of the material incentive increased. Primary importance was attached to boosting labour productivity of each working day and week, improving the organisation of labour, overfulfilling the planned targets and economising on fuel, raw and other materials. Nonetheless, in view of the extraordinary conditions of 1921 it was still necessary to organise the so-called weeks of labour, particularly in such fields as fuel production, railway transport,

that is, everywhere where urgent measures were required. Shock-work groups were formed in some sectors of the industry. The metalworkers, for example, adopted the following resolution: "Each member of the group is obliged to attain the highest possible level of labour productivity. A shock-worker (*udarnik*—*Ed.*) must set an example of strict observance of the rules of labour discipline laid down by the union."

As a rule, the experienced, hereditary workers set the pace in those days. All of them were highly skilled, had a long service record and were active in public affairs. They were respected for their knowledge and initiative, for always overfulfilling the set quotas, and also because they had fought in the revolutionary battles of 1905-07 and displayed heroism during the Great October Revolution and the Civil War. In 1921, they were awarded the specially instituted title "Hero of Labour". Some of their references, which have been preserved to this day, contained the following words: "performed the work of two men, refused to go on leave", "worked under enemy fire", "operated three lathes simultaneously", and so forth.

Such references, and there were thousands of them, manifested the workers' new attitude to labour and showed that they were coming to feel themselves masters of their country.

The news that the Englishman Leslie Urquhart requested the Soviet Government to return to him the Ridder and Eki-bastuz mines in the form of concessions caused a stir among the local workers. The capitalist claimed that without his assistance the natural resources of Kazakhstan would remain untapped for decades to come. But the workers thought otherwise. Carefully weighing their possibilities, they adopted a collective resolution which read in part: "We, Ridder workers, swear by our lives that we shall do everything in our power and die if need be, to help overcome the economic dislocation. We pledge that we shall restore all Ridder mines and factories."

The Central Committee of the RCP(B) discussed the Ridder issue. On October 5, 1922, the Council of People's Commissars under Lenin's chairmanship cancelled the provisional agreement signed earlier with the foreign capitalist. This

decision, Lenin noted, "was a direct expression, one may say, not only of the general Party sentiment but of that of the entire people, i.e., the sentiment of the entire mass of the workers and peasants".¹

Within three years the workers restored the Ridder mines without Urquhart and despite his gloomy forecasts.

It was only natural that the biggest successes were attained by industries which were on the state supply list. The greatest attention was focussed on the building of the Shatura, Kashira, Volkhov and other power stations rising under the GOELRO Plan. Their commissioning had a tremendous economic and political impact, for both directly and figuratively their electricity lit the way to socialism. Lenin kept close watch over the progress at these projects and received daily information on developments in industry. The Council of People's Commissars did everything it could to speed up construction: workers were carefully selected, Soviet and foreign-made equipment was delivered and additional funds and food supplies were made available.

The special attention devoted to key building projects yielded its fruit. Navvies, stonemasons, carpenters, plasterers, assemblymen and electricians worked in rain or shine, hot or cold. Even in frosts of -30°C the workers lit fires and hammered at the frozen earth with heavy iron bars. Without mechanisms they mounted the pylons burning their hands on the ice-cold steel cables.

Technicians were brought from Simbirsk to help build the Kashira-Moscow high-voltage transmission line. One of the most difficult tasks was to build the high smokestack, and volunteers were found for this job, too. They were the Borin family consisting of a husband and wife and their son, and three assistants. Without any machines (not counting a primitive pulley) to aid them, these six people got down to work. Everything else had been completed and it now depended on them when the project would become operational. They fulfilled the assignment with flying colours.

The workers gave way to jubilation when the inscription "RSFSR. 1922" appeared on the 75-metre high stack. A meeting was organised to mark the occasion. Workers

¹ V. I. Lenin, *Collected Works*, Vol. 33, pp. 387-88.

received awards and congratulatory speeches were made. Then the floor was given to the elder Borin. For a while he could not utter a word. At last he brought his excitement under control and said:

"Never in my life, citizens, have I ever heard such praise. Before, under the tsar, the contractor simply paid us, and that was all. He even underpaid us. And now—money, rations and a bonus, and praise showered on us in front of all the people as though we were heroes. No. We are not heroes, we are like the rest—working people. . . ."

The Kashira State District Power Station became operational on June 4, 1922. On the station's façade, next to Lenin's portrait was a poster with the inscription: "By persevering labour, with the sledgehammer, the plough and the spade we shall build up our national economy."

Yes, the first steps to the present-day height were made with the help of these implements.

A few days later the Presidium of the Supreme Economic Council adopted the following resolution:

"1. The workers and employees of the Kashira project will be rewarded with two weeks' wages, the Heroes of Labour—with two months' wages.

"2. The Heroes of Labour will also be presented with silver watches bearing appropriate inscriptions. . . .

"3. In fulfilment of the decision adopted at the meeting on the occasion of the commissioning of the power station, a plaque with the names of the Heroes of Labour will be attached to the façade of the station building.

"4. To recognise as desirable the construction of school for the workers and employees of the Kashira project."

The construction and the commissioning of the Kashira thermal power station in those very difficult years strikingly manifested the creative character of the dictatorship of the proletariat. The decision to build the station was taken by the workers' government and carried into effect by the working class so as to give electricity to factories, rehabilitate the industry and bring up the economy. It was only natural, therefore, that the workers' government while marking this achievement first and foremost paid tribute to the Heroes of Labour.

Borin and his comrades were unaccustomed to such praise, and they sincerely did not regard themselves as heroes. But it was a fact that the working man was becoming the real hero, and that was the source of the unconquerable might of the dictatorship of the proletariat. There was no longer any difference in the interests of the working class and the official authority. In the course of the revolutionary reorganisation of society the working class became the master of its destiny, the moulder of its happiness.

The autumn of 1922 was marked by another important achievement: the Krasny Oktyabr State District Power Station built by the Petrograd workers was put into operation. Simultaneously other power stations were going up, including such large ones as the Kizel Station in the Urals Area which was commissioned in 1924, the Shatura and Nizhni Novgorod stations which became operational in 1925, and the Volkhov Hydropower station.

The greatest hopes were centred on the Volkhov station which when completed would be the biggest in Europe at the time. Dozens of enterprises worked on orders for it and hundreds of enterprises needed its electricity. Thousands of unemployed workers in Petrograd were often told at the Labour Exchanges: "Just wait until the Volkhov station is built."

Very many people wanted to see the project on the Volkhov River and the builders readily showed the numerous excursions around the construction site. But the most welcome guests were the Petrograd workers who, in effect, were the project's patrons. On April 25, 1922, the *Krasnaya Gazeta* reported that the builders of the Volkhov station "decided to invite representatives of the Petrograd proletariat to visit them on May 1. The general meeting of the workers . . . decided that each worker would contribute a pound of bread towards the organisation of the May Day festivities. The administration of the construction site has assigned 250 million rubles for the same purpose. On May 1, a special train will bring representatives of the workers of Petrograd's largest factories to the Volkhov project."

The proletarian solidarity of the Petrograd workers and the builders of the Volkhov project manifested itself with particular force when it became known that work on the

project might be curtailed. In those days the press reported that Petrograd workers "persistently called for the speediest completion of the Volkhov project" at all Party and trade union meetings and at economic conferences.

They backed up their words with deeds. The workers of the Proletarsky (former Alexandrovsky) factory proposed to set up a fund of assistance to the Volkhov project. The first donation in the form of money and state bonds was made by the workers of the fitting and turning shop, and many others followed suit.

The nation-wide support led to the completion of the project which became operational at the end of 1926. By that time the Soviet Union was generating twice as much electricity as was produced in pre-revolutionary Russia.

The development of the power industry greatly depended on the production of coal and peat which were used at thermal power stations and on the production of electric motors, dynamos, ordinary electric lamps, steel, and so forth. In its turn the rise of each of these sectors of industry had a direct impact on the general course of industrial rehabilitation and the consolidation of the working class.

The rehabilitation of the Donets Basin was completed in 1925. Coal output in the Kuznetsk and Moscow basins by far surpassed the pre-revolutionary level. Engineering industry workers topped the 1913 production figures and launched the production of the first Soviet tractors, motor vehicles, complex textile machines, turbines and other items. In 1925, the Red Army's requirements in planes were fulfilled by Soviet aircraft factories.

Though some sectors lagged behind in development, industry as a whole had come close to exhausting the old production assets. Industrial rehabilitation, which some people thought impossible without foreign assistance and others considered that it would take decades, became an accomplished fact.

In the main, industrial rehabilitation took place on the old technical basis. Plants and shops which were closed down during the period of economic dislocation resumed production, water was pumped out of the old mines, and factories, some dating back to the nineteenth century, were reopened. Just as decades ago there were no building and mining

machines. More often than not the concept "horsepower" corresponded to its literary meaning: things were still very far removed from mass production and even from the kind of equipment that was introduced in industry in the first five-year plan periods.

While the technical basis remained unaltered, the relations of production acquired an absolutely new foundation. The majority of the workers were employed at state enterprises, and though they were still often referred to as proletarians, they knew very well that this word was used out of force of habit. The realisation that they were the masters of the country, the actual owners of the socialised means of production, became rooted in their consciousness as the years went by. It gave rise to the enthusiasm and the unprecedented creative uplift with which they set about restoring the war-shattered economy and ensured a rate of growth which would have been impossible in a capitalist society.

The working class knew that by reopening the old and building new enterprises it consolidated its ranks, strengthened its power and opened a new chapter in its history.

It was not an easy road.

The working class's rapid numerical growth was accompanied by substantial changes in its composition. This became particularly noticeable in the mid-twenties.

Who swelled the ranks of the working class? They were peasants and young workers of proletarian descent. In the period from 1922 to 1925, young peasants made up from 25 to 35 per cent of the total number of workers who got jobs at cotton mills in Moscow, Ivanovo Region and Petrograd; they made up approximately the same percentage of the metalworkers in the Ukraine, Moscow Gubernia and Petrograd and a slightly higher percentage of the workers of the iron and steel plants in the Urals Area and the Ukraine. They made up an absolute majority of newly accepted workers at the mines of the Donbas, the Urals Area and Siberia, in the oil and ore-mining industries. The influx from the countryside acquired ever increasing proportions as the old experienced workers began returning to their enterprises.

Yesterday's peasants had absolutely no knowledge of machinery. Their background endowed them with small-proprietor mentality and their general education level was

low, for the standard of literacy in the urban centres was always much higher than in villages.

Replenishments from the rural districts wrought serious changes in the composition of the industrial workers. By the end of the rehabilitation period approximately 50 per cent of them were either unskilled or semi-skilled. One out of every eight men and one out of every five women workers was illiterate, despite the fact that the general growth of culture even in those difficult conditions was faster than in pre-revolutionary Russia. The restructure of school education and the organisation of factory training and various vocational courses yielded their first fruits. On the whole, however, the industry was in dire need of highly skilled workers and could have developed at a faster rate if not for the low technical standards and general educational level of the replenishments.

The inflow of peasants into the industry also temporarily augmented the social heterogeneity of the working class. Explaining this process at a Congress of the Comintern, D. Z. Manuilsky said: "Our proletariat, a proletariat of a vast peasant country, is not a magnitude which is not subject to qualitative and quantitative changes. It has various strata within it: a very insignificant strata of pure proletarians who had completely broken away from the villages, and also a huge mass of the proletarians whose living and economic conditions and kinship ties connect them with the peasant mode of life. These ties can be broken down into a scale of types beginning with those peasants for whom seasonal work in cities is simply a source of additional income, and ending with those sections whose hands are the only source of earning a living."¹

In the final count all this had a negative impact on labour discipline, the attitude to production and the planned tasks. Things were further aggravated by the ruined economy and the food shortage. Absenteeism and reporting late for work were not considered serious offences. Often haymowing in villages, a relative's birthday or a church holiday were con-

¹ D. Manuilsky, *Classes, the State and the Party in the Period of the Proletarian Dictatorship. The Russian Question at the VI Congress of the Comintern*, Moscow-Leningrad, 1928, pp. 87-88.

sidered sufficiently weighty reasons for a worker to stay away from work. And could such a worker be blamed if he saw how often production came to a standstill due to lack of raw materials, fuel and electricity, and if he himself had never been subjected to factory rules. Everything seemed strange to him, the rigid timetable, the need to register his arrival and departure from work, the roar of machines, and so on and so forth.

Quite obviously this stratum of workers could not determine the basic interests of the production collectives, but their morale and behaviour could not but leave their mark on the activity of the enterprise as a whole.

The main drawback was that the veteran workers themselves had almost no experience in managing production and were still not used to the fact that now they were the masters. Such was the state of affairs not only in the early months of the Revolution, but also at the beginning of the twenties.

Spontaneous meetings, heated discussions were common during cigarette breaks. How high should the wages be? Should new rates be introduced? Should the old production quotas be preserved? Some sincerely thought that all workers should get equal wages irrespective of their qualification or the job they were working on. They motivated their arguments by saying that if communism is being established then the wages should be "justly distributed". A gigantic effort had to be made to mould a new attitude to work among the broad sections of the population.

It would have been naïve to think that the collapse of the bourgeois-landowner system would immediately and automatically obliterate all the survivals and evils of the past. The Party knew that the workers were building the new society without changing into other people free of the blemishes inherited from old Russia. Lenin said outright that socialist discipline of labour would take a whole historical epoch to develop.

The struggle for the labour discipline and production growth took place in extremely complex circumstances. Sometimes there were serious conflicts between factory administration and individual groups of workers not only in 1921 on the eve of the transition to NEP but also in 1922 and later. Most often the reason was delay in the payment of wages or

discontent with the existing rates. Usually these conflicts were caused by the inexperience of the administrative personnel, their inability to cope with production and business matters, introduce cost accounting and ensure the profitable operation of their enterprises.

In an effort to consolidate their positions and also to prevent the workers from leaving by keeping them busy, the trusts did not co-ordinate their activity and thus frequently caused each other difficulties. There was also unhealthy rivalry between them. Interdepartmental frictions impeded the improvement of the organisation of production, kept down the number of industrial workers and worsened their material conditions.

Some enterprises were objectively put on the privileged list. First, these were factories which had suffered the least damage in the preceding years, and, second, enterprises mainly engaged in the production of consumer goods. The first to go into operation were rubber trusts, soap works, glass and match factories and factories processing agricultural products. At the time it was the small factories (even of the semi-artisan type) that appeared to be the most viable. The greatest difficulties fell to the lot of the metalworkers, steel-melters and miners.

It was up to the trade unions to protect the workers' interests. The law allowed them to conclude collective agreements between the workers and the factory administration. In keeping with these agreements the industrial and office workers undertook to fulfil the plan and promote production. In return the factory administration guaranteed the stipulated labour conditions and the payment of the promised remuneration.

The Party set the trade unions the task of settling all conflicts peacefully. For this purpose special commissions and courts of arbitration consisting of representatives of the factory administration and factory committees were set up, though not at all the enterprises. Sometimes conflicts were extremely acute.

With the help of the Communists and foremost workers conflicts at state-operated enterprises were settled quickly. But the relations between the workers on the one hand, and the leaseholders, concessionaires and all sorts of nepmen, on

the other, were totally different. Private capital was building up its positions through the direct exploitation of the workers. Bent on reaping cash profits, entrepreneurs arbitrarily lengthened the working day, ignored the working and living conditions of the people in their employ and violated legislation granting certain privileges to juveniles and women workers. More often than not they did not hire people through Labour Exchanges as the law prescribed, but selected their workers from among the unemployed who were not members of trade unions and who could be more easily persuaded into accepting their offers. In the hope of forming their own "workers' aristocracy" the entrepreneurs payed higher wages to some of the workers.

The conflicts at these enterprises mirrored the struggle of the workers against their class enemy, the capitalists, who sought to get away from the control of the proletarian government. Soviet public organisations energetically defended the interests of the working people, in every way helping them to attain their objectives.

Private capital, which initially staked heavily on its strength, experience and craftiness invariably encountered the cohesion of the working people and their mounting political consciousness and activity. If, however, the capitalist elements persisted in violating labour legislation, they were brought to trial.

Addressing the Ninth Congress of Soviets in December 1921, Lenin noted: "...our court is a proletarian one, and it can watch each private businessman in order to see that the laws are not interpreted for them as in bourgeois states. . . ."¹ These words were uttered at a time when a show trial was in progress in Moscow involving proprietors who exploited juvenile labour, extended the working day and discharged trade union members. All 35 accused were found guilty, fined and sentenced to forced labour.

Sometimes Soviet courts passed heavier sentences on the nepmen for similar offences. It was indicative that most of the legal proceedings for criminal offences were instituted by the Commissariat for Labour and the trade unions, that is state bodies and public organisations of the ruling class.

¹ V. I. Lenin, *Collected Works*, Vol. 33, p. 171.

"While permitting voluntary hired labour," ran a statement in support of a court sentence, "Soviet power in the person of the People's Court is firm in its intention to protect the interests of the workers and will not let anyone infringe on them."

Support by the state and the public facilitated the workers' struggle for their rights and largely predetermined its outcome. The NEP in Soviet Russia was wholly unlike the one which the champions of the old order of things had hoped to see.

In 1925, the number of striking workers in industry, transport, trade and communications dropped by more than 80 per cent as compared with 1922, and involved less than 38,000 people.

The new attitude to labour became increasingly manifest as the years went by. The creative activity of the working class assumed many forms including production circles, production conferences, economic cells, groups of scientific organisation of labour which were set up at industrial and other enterprises.

Looking back now we can clearly see the importance of all these steps on the road from communist *subbotniks* to mass socialist emulation in the industry.

In the summer of 1920, Maxim Gorky complained to Lenin about the irresponsibility of the workers who pulled down wooden houses for firewood, broke window frames, smashed window panes and spoiled roofing iron. He thought that Lenin was "unaware of these trifles", as he put it. To this Lenin replied: "You're wrong in thinking that I attach no significance to trifles, and they are not trifles—the under-estimation of labour which you have mentioned is not a trifle, of course not. . . . But—how one can blame a worker for still failing to realise that he is already the master of everything there is?"¹

Lenin was certain that the workers would come to realise this. Here is another document dating back to the rehabilitation period, a verbatim report of a conference of the workers in the Vyborg District of Petrograd which took place

¹ A. M. Gorky, *Collected Works*, Russ. ed., Vol. 50, Moscow, 1955, pp. 167-68.

on a Sunday in October 1924. During the voting someone shouted: "The voting did not take place according to the rules. There are lots of people at the back who are not delegates and they also voted. Vote with your mandates!" The chairman calmly replied that if there were people other than delegates in the hall they were also workers. The occasion was symbolic: concerned with the question of raising labour productivity workers who had not been delegated to the conference sacrificed their day off to take part in the proceedings.

Lenin's prediction was coming true. Increasing numbers of workers consciously became involved in the efforts to raise production and became aware of their class's responsibility for the future of the whole country.

"A Hundred Thousand
New Party Cards"

That was how the poet V. V. Mayakovsky figuratively described the first results of the Lenin Enrolment to the Party. Lenin's death stunned the country. "What is to be done? How can we live without Lenin?" The masses themselves resolutely and unanimously replied: follow Lenin's path, rally still closer around the Communist Party and collectively consolidate its ranks.

On January 22, 1924, workers attending the first memorial meetings began applying for membership in the RCP(B). The general meeting held at the Krasny Bogatyr Factory recorded in its resolution: "In this hour, an hour of great sorrow and infinite confidence in victory, we declare at Lenin's grave: 'The strongest—into the ranks of the RCP(B). Each man and woman worker—rally closer around the Communist Party.'" The thousands of similar resolutions adopted in those days of mourning expressed the general sentiments of the working class. The number of applications to Party membership from front-rank workers increased with each passing day.

The movement for enrolment to the Party, which it seemed commenced spontaneously, was in effect a profoundly natural development. In fact, it mirrored the general political situation in the country and characterised the fusion of the Party with the working class, the links of the Communists with the entire nation which gained in strength as the economy continued to revive and new social relations were established in the USSR.

At the beginning of 1921, the RCP(B) had just over 700,000 members. Compared with tens of millions of peasants and workers this was a drop in the ocean. And not only the enemies doubted whether such a numerically small party would be able to raise peasant Russia to the building of socialism. These sentiments became more widespread when the Civil War came to an end and the masses became more and more disenchanted with the policy of War Communism. The alliance of the working class and the peasantry faced a serious threat.

The transition to NEP was the most striking evidence of the Bolshevik Party's concern for the relations between the workers and the peasants and the methods it used to strengthen their friendship in the interests of building socialist society. Needless to say, the Party Central Committee and the Government knew that the bulk of the population lived in rural districts and that the declassing of the proletariat was still continuing. But they were also well aware of the possibilities of Soviet power to rally the working people around their revolutionary vanguard.

Analysing the nature of the communist *subbotniks* and the process of their appearance and rapid spread throughout the country, Lenin in an article entitled "A Great Beginning" fully disclosed the interrelationship between the ruling Party, the working class and the peasantry which had appeared in the first years of the Revolution. Then, in April 1919, when the Civil War was going through one of its most difficult periods, the Central Committee of the RCP(B) published a letter entitled "To Work the Revolutionary Way". Addressed to the Communists, there were approximately 200,000 at the time, this appeal was taken up by the organised workers (about 4,000,000 living in the Russian Federation and the Ukraine). "Two hundred thousand and four million—such is the ratio of the 'gear-wheels', if one may so express it. Then follow the *tens of millions* of peasants."¹

The majority of them were semi-proletarians or the poor. Being a working man himself, the peasant was the worker's most loyal ally in the fight against landowners and capitalists. "As working men, the peasants, the vast mass of them,

¹ V. I. Lenin, *Collected Works*, Vol. 29, p. 433.

the peasant millions, support the state 'machine' which is headed by the one or two hundred thousand Communists of the proletarian vanguard, and which consists of millions of organised proletarians."¹

To ensure the uninterrupted functioning of this "mechanism" with which the Party influenced the masses, and the normal functioning of the entire system of proletarian dictatorship, it was necessary to display the greatest circumspection and flexibility and unswerving fidelity to Marxism. It had to be borne in mind constantly that in the transitional period from capitalism to socialism the working class continued to be the Party's principal social mainstay. No other class could either economically, politically or organisationally assume the role of the principal transforming force of society. The toiling peasantry (right up to the victory of the collective farm system) was a class of small proprietors with its inherent vacillations. The New Economic Policy revived the remnants of the exploiter classes. It had to be taken into account that careerist elements managed to infiltrate the ranks of the RCP(B), for it was the ruling party. The composition of the RCP(B) also suffered from the loss of many front-rank proletarians who were killed in action.

In 1921, workers made up not more than 30 per cent of the Party membership, compared with 56 per cent in 1917. In this period the percentage of the peasants in the Party rose from 16.3 to 41. The number of office employees and others remained almost unchanged. Viewing these changes with the utmost seriousness the Tenth Congress of the RCP(B) instructed the Central Committee to "resolutely turn the lever of Party policy towards recruiting workers and purging the Party of non-Communist elements."² Launched shortly afterwards the purge was conducted with the mass participation of workers who were not Party members. Nearly a quarter of those screened were ousted from the Party. Forty-five per cent of them were peasants. On the average 83 out of every hundred worker-Communists and 58 out of every hundred peasants remained in the Party following the screening.

The well-organised purge cleansed the Party cells of

¹ Ibid.

² CPSU in *Resolutions...*, Part I, p. 520.

undesirable elements, made them more battleworthy and enhanced their prestige with the masses. These measures alone could not strengthen the workers' nucleus of the Party. The very conditions of the transitional period, the multisectoral economy and the social heterogeneity of the working class could expose the Party to petty-bourgeois influence. It was, therefore, necessary to change the rules governing admission to the Party.

The Party Rules adopted in December 1919 provided for a two-month probationary period for workers and peasants and a six-month probationary period for all the other applicants. Lenin demanded to extend the probationary period for workers to six months and also to define the concept "worker" so that it would apply only to those people who in effect developed a proletarian psychology due to their position in life. "But this is impossible," he wrote, "unless the persons concerned have worked in a factory for many years—not from ulterior motives, but because of the general conditions of their economic and social life."¹ It should be noted that this applied only to industrial workers. But Lenin reduced even this group to those who had "actually been employed in large industrial enterprises for not less than ten years".² It was these people whom Lenin regarded as the most staunch and reliable bulwark of the ruling Party.

The Eleventh Congress of the RCP(B) fixed the probationary period for industrial workers and those workers and peasants who were in the Red Army at six months, for peasants and handicraftsmen at one year and for all the others at two years. These measures were designed to improve the proletarian composition of the Party and close its doors to petty-bourgeois elements.

At the beginning of 1922, there were four Communists per 1,000 of the population, of which 15 were in the cities and two in the rural districts. Life imperatively called for an expansion of contacts with all sections of the working people. Above all it was necessary to form groups of the most active workers at enterprises and to assign people with the best political training to leading administrative posts. In its letter "On the Attitude to Workers Who Are Not Party Mem-

¹ V. I. Lenin, *Collected Works*, Vol. 33, p. 257.

² *Ibid.*, p. 254.

bers", the Central Committee of the RCP(B) noted: "He is not a Communist who will be unable to group a number of honest non-Party workers around himself, maintain daily contact with them, visit their homes, help them in their day-to-day life, provide them with newspapers and choose from their midst people for work in the trade unions and the Soviets."

Things were made difficult by the opposition of some Party functionaries to Lenin's methods of approaching the masses and drawing them into socialist construction. Some of them had become used to the fact that during the Civil War it had been necessary to curtail trade union democracy. In those trying years almost no general meetings of industrial and office workers were held, elected bodies rarely reported back to their electorate and trade union leaders were usually nominated and not elected. The Trotskyites wanted to preserve this state of affairs in peacetime, too. Advocating methods of administrative injunction and militarisation of labour, Trotsky demanded that the trade unions should be turned into a part of the state machinery.

A group calling itself the "workers' opposition" went to the opposite extremes. They regarded the trade unions as the sole organisation capable of correctly managing all factories and branches of industry. In their opinion the entire national economy should be controlled by what they called the "all-Russia congress of producers". This would have depreciated the role of the Communist Party and completely negated the economic functions of the state. In words it was an expression of absolute trust in the working class. Yet it was all too obvious that since the workers constituted the numerical minority of the population the industrial vanguard of the Revolution would have also been in the minority in the all-Russia congress of producers. Certainly that was not the way to strengthen the dictatorship of the proletariat in a peasant country.

But life shattered all oppositional points of view. Lenin's views prevailed. The Party adopted the course of promoting democratism in trade union activity and the conscious participation of the workers in managing production and public life. The All-Russia Central Council of Trade Unions proclaimed the defence of the workers' material and legal in-

terests as the principal task of the trade unions and ordered them to devote particular concern to the working people temporarily employed at private, leased or concessionary enterprises. Admission to trade union membership became voluntary and each member paid his dues himself. (Previously all workers were automatically considered to be members of their corresponding trade unions and the administration deducted their dues from their wages.)

Steps were taken to expel non-proletarian elements. This category also included artisans who worked by themselves, for with the revival of the commodity turnover and market ties they in effect became independent small proprietors. Nepmen were also ousted from the trade unions.

At first trade union membership dropped from approximately seven million in 1921 to 4.5 million in October 1922. The trade unions did not slacken their activity. They acquired greater rights and their prestige mounted. They concluded collective agreements with the factory administration, controlled the strike fund and played the leading role in dispute commissions and consistently improved working and living conditions. Trade union members were entitled to privileges when applying for jobs.

Exercising their functions through factory committees, production circles and meetings, various commissions and general meetings and conferences, the trade unions extended their influence over the broadest sections of the working people and drew them into the management of individual shops, factories and the industry as a whole. F. E. Dzerzhinsky, who was appointed chairman of the Supreme Economic Council, said in one of his speeches: "Comrades professional workers, comrades workers at the bench. . . . You know that our apparatus is weak, that we have not trained it sufficiently, that there are not many people from whom we could pick our personnel, whereas you have factory committees, workers' cells, production meetings, you have the means of improving and rationalising production. . . . We shall be able to rationalise production only if you and we together set our wits to work."¹

¹ 14th Conference of the RCP(B). *Verbatim Report*, Moscow-Leningrad, 1925, pp. 213-14.

Towards the end of the rehabilitation period trade union membership surpassed the 1921 figures and by the summer of 1926 numbered 9.2 million. The largest industrial trade unions were those of the metalworkers—682,400 members, textile workers—681,200, and miners—312,900.

By that time the Komsomol developed into a very formidable mass bulwark of the Party. At its Third Congress the Russian Communist League of Youth decided that the cell at the enterprise would be the basic form of its primary organisation. To enable each cell to maintain close contact with all young men and women, the Komsomol organised meetings of delegates and conferences of non-Party young people. The Komsomol played a prominent role in all fields of economic and public activity. In 1922, it initiated a Young Pioneer movement which first embraced the children in the industrial centres.

Then it put forward the slogan "A Young Pioneer Detachment for Each Komsomol Cell". In the spring of 1925, there were about 15 Young Pioneers per 100 of the children living in towns and two per 100 children in the rural districts.

In 1922, the Komsomol proclaimed itself the patron of the Red Navy. It was important for the country to increase its naval strength and thousands of young proletarians joined the Navy.

The young workers displayed resourcefulness and energy in combating illiteracy, organising cultural and educational work and anti-religious propaganda and setting up sports societies. It was hard work, for on top of the general difficulties there were other obstacles such as inexperience and lack of knowledge. At times even their youthful fervour became an impediment.

By the end of 1925, the Komsomol united more than 1.6 million of the foremost representatives of the country's youth. Just as the trade unions, they were a reliable support of the Party in the struggle for the dictatorship of the proletariat.

The multifarious activity of the trade union and Komsomol activists strengthened the Party's links with the masses, rallied all the detachments of the working class around the in-

dustrial proletariat and tremendously enhanced the influence of the industrial centres on the country's rural districts.

Lenin always attached exceptional significance to this influence. In January 1923, in one of his last articles he raised in all seriousness the question of turning the urban worker into a vehicle of communist ideas among the rural proletariat.

This was done in a thousand different ways in the past, too: when workers went to the countryside to elucidate the meaning of the New Economic Policy, when they saved the children of peasants during famine, when they fought together with the peasants to crush kulak mutinies, when they served shoulder to shoulder with them in the Red Army, and so forth. In 1923, Lenin's article inaugurated mass patronage of cities over the countryside. By the beginning of 1926, over 1,200,000 people were already united in cells of the Workers' Society for the Linking of the Town and Country. The dues payed by its members and the funds collected from the *subbotniks* and other fund-raising undertakings were spent on books for the rural population, on cultural and educational activity and on the organisation of trips by peasants to towns and workers to the villages during official holidays.

Workers spending their annual holidays with their relatives in the rural districts were asked to lecture to the peasants, read newspapers to them, disseminate books and other publications, set up reading rooms and first-aid stations.

The patrons did not confine themselves to political and educational activity alone. By the end of the rehabilitation period they were playing a prominent role in establishing all types of co-operatives, artels and communes. The tractors and other machines they purchased helped them to overturn the old mode of life and break the ground for the social reorganisation of the individual peasant-farm village.

Thus, by the end of the rehabilitation the Communist Party had a million members, the Komsomol 1.6 million and the trade unions eight million. These people, to use Lenin's expression, were the "gear-wheels" of the dictatorship of the proletariat which set Russia's popular masses in motion and drew them into economic and public activity. The urban pro-

letariat was the mainspring of this mechanism. Accordingly the state structure of Soviet Russia, the activity of public organisations were conducive to the systematic promotion of workers to administrative and economic posts, to their election to organs of power and involvement in the work of Party and Komsomol cells.

The Constitution of the RSFSR and the All-Union Constitution which was adopted following the formation of the USSR ensured the working class the leading role in the Soviets. The provisional election privileges consisted in that the representation quota from the cities and industrial townships was five times higher than from the rural districts. This ensured the workers greater rights and at the same time imposed a tremendous responsibility on them. The confidence of the electorate was proof that the working class was successfully fulfilling its historic mission.

Workers made up 39 per cent of the delegates at the Ninth All-Russia Congress of Soviets held in December 1921. Exactly a year later workers made up 44 per cent of the delegates of the Tenth Congress and in December 1923 they comprised over a half (51.9 per cent) of the delegates attending the Eleventh All-Russia Congress of Soviets.

There was a similar tendency in the elections to city Soviets: 44 per cent in the Russian Federation in 1922, and 46 per cent in 1924/25.

People of working-class origin held leading posts in all institutions and organisations—the Supreme Economic Council, the commissariats, trusts and boards, co-operatives, sports associations, the court and the procurators' offices.

By the beginning of 1924, more than 50 per cent of the trusts were headed by former workers, who also made up 62 per cent of the directors of textile trusts and 77 per cent of the directors of metalworking trusts.

In 1922 and 1923, the *Pravda* held a contest of factory directors. It asked the workers to characterise the people who were standing at the head of their enterprises. Subsequently the newspapers carried articles on the life and work of about 150 economic executives of the new type. Most of them were workers who had taken part in the Revolution. The judges named 12 of the best. The first place was won by the director of the Dynamo Works, Communist K. V. Ukhonov, formerly

a fitter. Then followed the names of I. R. Burdachev (Serp i Molot), N. V. Arkhangelsky (fulling mill), Abakumov (Rutchenkovsky Mine) and others.

No less important were the results of a poll conducted by the Central Committee of the RCP(B) among the workers of 1,329 major enterprises of the Supreme Economic Council. They were asked to give an opinion about their directors and how they coped with their duties. The results revealed that only nine per cent of the directors had to be replaced. Promoted workers enjoyed the greatest authority at all enterprises.

The situation was the same in the sphere of trade union activity. In 1924, workers made up 75 per cent of the members of all the factory committees. They were in the majority among the leadership of the gubernia trade union councils, among the chairmen and members of the central committees of the trade unions. Many of them were known throughout the country. The Union of Metalworkers was headed by the worker I. I. Lepse, and another worker, I. I. Kutuzov, was the head of the Union of Textile Workers. The leader of the miners' union was its talented organiser F. A. Sergeyev (Artem).

The bulk of the promoted workers were members of the RCP(B). This mirrored the state of affairs: foremost workers with advanced political views considered themselves duty-bound to join the Communist Party; at the same time they were the sort of people whom the working masses promoted to leading economic and political spheres. The authority of the ruling class and its Party mounted steadily.

The year 1922 was marked by a growth of the workers' nucleus in the Party. A year earlier workers made up less than 30 per cent of the newly admitted members, whereas in 1922 they comprised over 42 per cent. The influx into the Party increased in 1923 when it observed its twenty-fifth anniversary. The Central Committee in its appeal "To the Working People of the USSR" summoned the veteran workers to impress upon the "young workers that there is no loftier task and no greater honour than to live and work for the Party of the proletariat, for the Russian Communist Party, which is leading it to final victory over the bourgeois world". In response there was a great flow of applications for

Party membership. Large numbers of people, including non-Party members, took part in meetings which were held in towns and rural districts. And in 1923, the first delegations of non-Party workers and peasants attended the Twelfth Congress of the RCP(B). Delegations from the major industrial centres and rural areas took part in a special session held in the Bolshoi Theatre, and their speeches were an injunction to the Party to follow the Leninist path, to uphold the unity of the Communists and strengthen the alliance of the workers and peasants.

Another important manifestation of the cohesion of the working people around the Bolshevik Party was the debacle of the remnants of counter-revolutionary parties and nationalistic organisations. Already in 1921, their leaders resembled generals who were abandoned by their troops.

During the 1922 elections to the Soviets individual representatives of petty-bourgeois parties managed to get themselves elected to these organs of state power. Even in the Moscow City Soviet there were three Mensheviks and three Left Socialist-Revolutionaries. In 1923, the Bolsheviks achieved complete and undisputed victory. The Thirteenth Conference of the RCP(B) noted: "The confidence of the *proletarian masses* in the Party has grown. This fact has found its expression in the elections to the Soviets, in the collapse of the Menshevik and Socialist-Revolutionary parties, in the formation of cadres of non-Party workers actively supporting the Party."¹

The Lenin Enrolment was a logical culmination of the processes expressing the changes in the numerical strength and the composition of the working class of the USSR during the years of rehabilitation and which mirrored its mounting role in the life of the country. "Why did I choose precisely this moment to join the Party?" the veteran miner, Hero of Labour Saprionov asked and replied: "It is my pledge to Lenin that I will fulfil his behests." Leontyev, a fitter from Donetsk, said: "By joining the Party, we, workers, are demonstrating the strength of the RCP(B) and showing that the entire working class is on its side."

¹ CPSU in Resolutions... , Part I, p. 772.

More than 350,000 people applied for Party membership. With the active participation of non-Party people, the Party accepted almost 250,000 workers into its ranks. Out of every 1,000 metalworkers 144 joined the Party, then came the railwaymen—108, miners—68, and textile workers—51. Prior to the Lenin Enrolment there were 39 Communists per a thousand of the workers, and 114 after it. In May 1924, the workers had an absolute and a relative majority in the Party, making up 55.4 per cent of its membership.

Life confirmed Lenin's prediction: the rehabilitation of industry halted the declassing of the proletariat; the Party received powerful support and an influx of fresh forces; the dictatorship of the working class became stronger and mightier.

The next task was industrialisation, the creation of a modern large-scale industry essential for the complete victory of socialism in town and country and for augmenting the defensive potential of what was the world's first and so far the only proletarian power.

The policy of effecting socialist industrialisation proclaimed by the Fourteenth Congress of the Party in December 1925 was made possible by the entire course of the economic rehabilitation and the general process of the development of the working class. In order to complete the transition from capitalism to socialism, eradicate the causes giving rise to exploitation, abolish the remnants of the exploiter classes, turn individual farmers into collective farmers and state-farm workers and to wipe out unemployment, it was necessary to overcome the agrarian character of the economy and to turn the USSR into a mighty industrial state.

Such were the historic tasks set by the Fourteenth Congress. The Party cast aside the doubts and vacillations of the opposition which had lost all faith in the creative forces of the proletarian revolution. The political cohesion and ideological maturity of the Communists were further proof of the battleworthiness of the working class and its ability to multiply its achievements.

BUILDING THE FOUNDATION OF SOCIALISM (1926-1932)

Steering a Course Towards Industrialisation

As the Soviet Union entered 1926, the people braced themselves for the great work that lay ahead. At the time it lagged far behind the advanced capitalist countries in industrial development yielding only 2.4 per cent of the coal, 5.9 per cent of the steel, 5.5 per cent of the iron ore, 5.5 per cent of the electric power and 2.9 per cent of the machines produced in the world. In a mere 10 or 15 years the Soviet people would have to accomplish what other countries accomplished in several decades.

The working class was firmly determined to follow the course charted by the Fourteenth Congress and to complete socialist industrialisation. Replying to the sceptics and defeatists the working class promised to give the country all the coal, metal and machines it needed.

On January 1, 1926, the *Trud*, the organ of the Soviet trade unions, reported that the Alexeyev printed calico factory in Leningrad would shortly resume production, that Flax Trust factories were enlarging production and that other enterprises were operating successfully. There was nothing sensational in these reports, but their very ordinariness signified that the people were winning the battle against economic dislocation. The New Year's issues of newspapers wrote about the future with confidence and optimism. Having healed the country's war wounds the people were scanning the road ahead. A great deal lay

ahead. The colossal natural resources of the Soviet land lay untapped.

Industrialisation became the general line of the Soviet people on the road to socialism and they advanced towards this goal led by the working class which by 1926 numbered 5.5 million workers of whom 1.8 million were employed in large-scale industry.

At the outset of the industrialisation the private-capitalist and the private-state sectors comprised an insignificant part of the national economy employing just over two per cent of the total number of workers in the country.

Skilled, veteran workers made up the backbone of the working class. A census of the workers in the metalworking, textile and mining industries taken in 1929 showed that more than 50 per cent had a service record going back to before the October Revolution and more than a fifth (21.3 per cent) to before the first Russian revolution. That meant that over a half of the working class had a service record of over ten years when industrialisation was launched. These people, who were tempered in three revolutions, and who shouldered the burden of the fight against famine and economic dislocation, were utterly devoted to the Communist Party. For the sake of the great cause of building socialist society they were prepared to work indefatigably and surmount all the difficulties of those strenuous years.

The other workers had a shorter service record. Having started to work after the October Revolution they had never been hired by a proprietor and often took the privileges given by Soviet power for granted.

Eighteen per cent of the factory workers were under 20, over 60 per cent were from 20 to 39 and over 20 per cent were from 40 to 59 years of age. Workers aged sixty and over made up a mere 1.2 per cent of the total.

In 1926, women accounted for 28.4 per cent of the working class. The Soviet Government took serious steps to draw them into social production and female labour became much more widespread in the USSR than in pre-revolutionary Russia. Kindergartens, nurseries and lunchrooms were opened to make things easier for the women workers who were also granted special privileges at their places of work.

The working class was heterogeneous in its composition. About a half of the factory personnel were second or third generation workers and constituted the nucleus of the working class, the chief mainstay of the Party and the Soviet state.

The other half of the proletariat were people who only recently lived in the rural areas. Some, particularly those especially attached to the soil, found it difficult at first to adjust themselves to the new conditions and to regard the factory as their second home.

The mine workers had the closest links with agriculture. Towards the end of the rehabilitation period nearly 50 per cent of the Donets Basin and Moscow Region miners had houses and land in the countryside. Approximately 20 per cent of the textile workers also had houses and plots in the villages. As regards the metalworkers, only six per cent of them had land. According to a census conducted by the trade unions in 1929, 22 per cent of the industrial workers preserved their ties with agriculture. Since the census did not take all the workers into account it may be safely said that by the beginning of the industrialisation one out of every four industrial workers had a farm in the countryside, a factor which naturally influenced his psychology and behaviour.

Small-proprietor feelings were particularly high in this category of workers, who, according to Lenin, wanted to snatch a bigger slice and then get out.

The social heterogeneity of the working class considerably impeded its development. On the one hand, the number of enthusiasts, shock-workers and heroes of labour dedicated to the great cause of socialist construction increased steadily, while on the other, there were still shirkers and money-grabbers who either covertly or overtly held up the building of a new society and among whom the Communist Party had to conduct patient explanatory work.

The number of Party and Komsomol organisations increased steadily. By the beginning of the industrialisation approximately 15 per cent of large-scale industry workers, primarily hereditary proletarians, were members of the Communist Party. At the end of 1927, the Komsomol had over 2,000,000 members of whom 500,000 were workers.

The Party and Komsomol members were in the vanguard of the entire mass of workers and by personal example showed them how to build a new life. They were ably assisted by the trade unions which united more than 90 per cent of the workers.

It was a difficult period in the life of the country, but the real wages of the workers had already reached the pre-war level and made up the bulk of a family's budget. The role played by trade, handicrafts and other additional sources of income declined and was almost negligible. The pattern of a family's expenditures changed completely. Whereas previously almost every kopeck was spent on food, now the workers had more money with which to satisfy their other requirements. They were able to buy more textiles, footwear and household goods and the sums expended on newspapers, magazines and books and other cultural needs rose considerably as compared with pre-revolutionary period. Still, it was only the beginning.

One of the most urgent tasks was to raise the workers' cultural and technical level. The 1926 census showed that 45 per cent of the population of the USSR was illiterate. And although 88.3 per cent of the urban population was literate (literacy was higher among men than women), the influx of workers from the rural areas steadily increased the number of illiterate industrial workers. Of the total number of workers employed in large-scale industry 84.1 per cent were literate. At the smaller enterprises this number was considerably lower.

The general skill of the workers was also low. Although in 1926, factory personnel consisted of 53.4 per cent of skilled workers, 26.3 per cent of semi-skilled and 20.3 per cent of unskilled workers, the standards determining a worker's skill were much lower than in the subsequent years. Industrialisation and the reconstruction of the economy called for a considerably greater number of educated, highly skilled workers.

Both the successes and the difficulties of socialist construction were largely due to the composition of the working class. Its foremost contingent consisting of hereditary proletarians, Communists and Komsomol members were in the vanguard of the struggle for a new life. Their contagious

enthusiasm and energy penetrated all sections of the working people drawing them into active and conscious building of a new world.

Surmounting the tremendous difficulties of the reconstruction period the working class countered the intrigues of the class enemies, cowards and the sceptics by learning to work the new, socialist way.

The First Shock-Work Teams

Industrialisation meant the reconstruction of the old factories and the construction of new industrial enterprises. In its decisions the Fourteenth Party Congress laid special emphasis on the fact that one of the most crucial tasks of the time was to rationalise production, renovate the equipment and to introduce new production technology. The Party called upon the working class actively to join in the efforts to improve technology and the organisation of production. Posters reading: "Learn to work the new way", "Set up rationalisation teams" appeared in factory shops, repair workshops and at building sites.

The Communists and Komsomol members were the first to search new methods of work, and just as during the Revolution and the Civil War, they were active in the most vital sectors where the future of socialism was being decided.

In the spring of 1926, when the country was discussing the decisions of the Fourteenth Party Congress, the Komsomol members of the carriage repair shop of the Moscow-Kazan Railway, where the first ever communist *subbotnik* was held in 1919, decided to go over to new methods of work. Seventy-five young workers headed by Nikolai Nekrasov, a Komsomol activist and innovator, formed a team of mechanics. They intended to prove that it was possible to work better and faster without altering the existing quotas and rates.

The young workers started out by registering exactly what each of them accomplished in a shift. This enabled them to organise competition and to assist those lagging behind. They made it a rule that a skilled worker who was a Komsomol member was to train an unskilled young worker and in this way the team helped 25 young men to improve their skill. Many of them got higher grades. Labour productivity

rose steadily and within several months the team was earning the highest wages.

In the words of the repair-shop manager, the team was disciplined, worked with a will and set an example for all the other workers.

The first objective was attained. Nekrasov's team was setting the pace. Now it could tackle more complicated problems. Once Nekrasov asked his team whether it would be able to cope with its assignment with fewer workers.

After a long discussion in the course of which the young workers spoke about the Party's recent appeal to launch an economy drive and to rationalise production, about Lenin's behests to the youth and about the team's initial successes, they unanimously decided to put Nekrasov's suggestion into effect.

Rationalisation proposals were not long in coming. Many of them were accepted with the result that it proved possible to transfer 17 workers to other teams. Now a group of four team members performed the work of five and even six workers.

News about the successes of the Nekrasov team reached other enterprises. The workers of the Northern Railway sent a letter to the young enthusiasts which said: "Dear comrades, we have heard a great deal about your achievements. Your active participation in production conferences, your inventions and improvements place you in the ranks of the leading workers. And so we have decided to send you an open letter.

"We want to know how you managed to reduce the number of absenteeisms and latecomers and how you went about forming your team of hard-working young workers."

The working class was writing the names of its foremost representatives into the history of the industrialisation.

Youth teams who went over to new methods of work appeared also in Leningrad and the Urals Area.

The drive for higher labour productivity, improvement and rationalisation of production spread throughout the country.

Young workers at the Lysva iron and steel works, one of the industrial enterprises in the Urals Area where youth teams were formed, decided to check the quality of the kiln-

ing, find out the exact productivity of the furnace and determine the maximum work quotas.

There was some resentment among a part of the workers, but Komsomol members went ahead with their plan. They discovered that work quotas could be raised since many workers were slacking. The Komsomol members strenuously defended their conclusions at a production meeting and after heated debates the workers decided to raise labour productivity by 25 per cent, and did so.

At the Zlatoust mechanical plant shock-work teams were formed in the press and tool shops and also in the grindery where they were the first to introduce line production. Writing about the activity of shock-work teams at industrial enterprises in the Urals Area the *Komsomolskaya Pravda* noted that they broke down the scepticism of the workers, shattered the old traditions and, in general, lived up to expectations. Calling the formation of shock-work teams an important and useful undertaking, the newspaper said: "A shock-work team fights against obsolete methods of work and educates the young workers."

As the new forms of labour gradually came into their own, they wrought a change in the psychology of the worker. He became a socialist worker who subordinated his personal interests to the general interests and wholly dedicated himself to the building of socialist society. Poets and composers dedicated their poems and songs to such workers.

The mass shock-work movement was inaugurated at the Ravenstvo textile factory in Leningrad, where the first shock-work teams consisting not only of young, but also of veteran skilled workers. The drive for accelerated production rates was initiated on July 16, 1928 by Semyon Zhukovsky's team. Always in the front ranks of the builders of socialism Zhukovsky subsequently graduated from an institution of higher learning and was an engineer at the Kirov Works, where he was killed in an artillery bombardment during the blockade of Leningrad. E. Kozhevnikova, another member of the team, was made shop superintendent at the Krasnaya Nyit combine. A. Musolin, who had also been on Zhukovsky's team, graduated from the Civil Airlines Institute and devoted his life to training military personnel. He has the rank of Colonel of Engineers and is a Candidate of Technical

Sciences. S. Kostina, yet another member of the team, is a trade union functionary. At first she was elected chairman of the factory committee and then was elected to membership of the Central Committee of the Union of Cotton Industry Workers.

But let us return to the twenties. The first shock-work team proved its worth: production increased sharply and rejects fell by 90 per cent. The old, experienced weavers likewise decided to switch to the new methods of work.

In October 1928, a total of 108 women workers, 70 per cent of whom were between 27 and 55 years of age, joined the shock-work teams.

The newspaper *Smena* reported the initiative of the Ravnstvo workers and many industrial enterprises in Leningrad sent their representatives to the factory to study the experience of the shock-work teams on the spot.

The introduction of new methods of work was not a smooth process for naturally it was impossible to cultivate a new attitude at short notice. Lenin warned that the transition to conscious and free labour would take decades.

The backward workers opposed the shock-work movement realising that it would put an end to indiscipline, stagnation and negligence. They spread falsehoods about the shock-work teams, strove to discredit the movement itself and tempered with machines and other equipment.

But nothing could break the determination of the working class to accomplish the industrialisation. Socialist industry developed and strengthened with each passing year.

In the first year of the industrialisation drive the Soviet Government invested over 750 million rubles into the industry, and approximately 1,000 million rubles in 1927. With the help of the Soviet people, including the working class, the Government was solving one of the most difficult problems of the time, the problem of accumulation. Enforcing a rigid policy of economy, rationalising production and curtailing unproductive outlays, the workers in response to the Party's appeal joined the campaign to draw the people's savings into the industrialisation of the country. In August 1927, the Government floated the First Industrialisation Loan. "I am a worker," wrote K. Petrov of Moscow to the *Pravda*, "and consider that the Government acted wisely by launching the

Industrialisation Loan. No capitalist will grant us a loan knowing full well that it would only strengthen our might. Our equipment is obsolete; we need modern machine tools and new factories. I believe, therefore, that the loan is definitely in the interests of all conscious workers and we shall subscribe to it as a man." Petrov expressed the thoughts of thousands of workers. Economising on big things and small, frequently stinting themselves in essentials, the working people invested their savings into industrial development.

In Moscow the subscription list was headed by the Sokolniki Railway Carriage Repair Works whose workers handed over 40 per cent of the monthly wages to the industrialisation fund. Many enterprises organised *subbotniks* and *voskresniiks* and the funds raised were expended on the purchase of state-loan bonds. The subscription to the First Industrialisation Loan was completed within the very short period of ten weeks.

Obviously, the population's savings made up only one, and a relatively small, source of socialist accumulation. In the 1928/29 fiscal year, state loans accounted for 3.3 per cent of the budget revenues, and 7.2 per cent in 1933. In absolute figures the sums were very considerable. The total revenues from the state loans floated in the First-Five-Year economic development period were equal to the cost of three giant iron and steel plants, the size of the Magnitogorsk Works. The main funds for socialist construction were drawn from the deductions from the nationalised industry and from agriculture. In the First Five-Year period they accounted for 77 per cent of the budget revenue, and for a still greater share in the coming years. Thus, the planned socialist system of the economy ensured a steady growth of investments into industrialisation.

Factories, power stations and workers' townships mushroomed. The country was a giant construction site where industrial enterprises were built up from scratch and new relations between people were formed. In December 1926, one of the key projects of the first industrialisation years, the Volkhov Hydroelectric Power Station, Europe's biggest at the time, was put in operation. It was a momentous event in the history of the Soviet people.

Another five power stations, the Shatura, Shterovka,

Nizhni Novgorod, Zemo-Avchala and Krasny Oktyabr, were completed and commissioned in 1927.

In 1926/27, 528 industrial enterprises were under construction and 260 were being reconstructed. From the centre of the country, industrialisation spread to the border regions of the former tsarist Russia. In 1927, the Ridder Lead Combine in Kazakhstan was put in operation, and the construction of the Karsakpai and Transcaucasian copper-smelting plants was proceeding apace.

Work was started on the construction of the Turkestan-Siberian Railway (Turksib), or friendship road as it was called. The national contingents of the working class swelled and strengthened with the assistance of the Russian workers.

Much had already been done, but a great deal was still to be accomplished. In 1928, Soviet factories manufactured 47 turbines, 841 motor vehicles and 1,300 tractors. Thus, after three years of industrialisation the Soviet Union was still an agrarian-industrial country. The proportion of industrial output in the national economy did not exceed that of agriculture.

At the Helm of the State The working class headed the drive for socialist construction. Manifesting its leading role in all fields, it was the real master of the Soviet state firmly steering the course mapped out by the Fifteenth Party Conference which indicated that "the industrial proletariat, as the leading class of Soviet society, must continue to make every effort to strengthen its position, influence and its role".¹

First and foremost workers were assigned to leading posts in industry. Over 50 per cent of the leaders of the highest industrial bodies were of proletarian origin, and three-quarters of the total number of factory directors were former veteran workers.

I. A. Likhachev, a son of a veteran printer, was made director of the AMO Auto Works in Moscow on January 1, 1927. He started out as a worker at the famous Putilov Works in Leningrad. He joined the Party in 1917, and prior to his appointment to the post of director of the AMO

¹ *GPSU in Resolutions...*, Part II, pp. 311-12.

Works, worked in the Moscow City Council for Industrial Construction. He was only 30 when he was put in charge of the biggest industrial enterprise in Moscow.

In 1926, a new director was appointed to the Krasny Putilovets Works. He was V. F. Grachev who started out in life as a baker's errand boy. Later he became an apprentice at an engineering plant in Moscow and then moved to Petrograd where he worked as a fitter at the Nobel Factory. After the October Revolution V. F. Grachev headed surplus food-requisitioning detachments in the Ukraine and Siberia and then held a responsible post in the Metalworkers' Trade Union. He was placed at the head of one of the country's oldest industrial enterprises at the age of 37.

The working class managed socialist production. Through production meetings, provisional production control commissions and other democratic bodies the rank-and-file workers administered and controlled their enterprises. In 1926, an estimated ten per cent of the workers participated in production meetings and 30 per cent in 1928. Reports and plans, reconstruction and rationalisation of production, cost price and quality became matters of direct concern for the new masters of production.

In the Soviet Union, a land of the dictatorship of the proletariat, the working class held the commanding heights in the economic and political fields. Workers became members of Government, People's Commissars, heads of Party organisations and Red Army commanders.

Having attained leading positions, they were always aware of their kinship with the working class and relied on it for support. Characteristic in this connection was the unsuccessful attempt on the part of hostile elements to discredit Chairman of the USSR Central Executive Committee M. I. Kalinin as he addressed the workers of the Leningrad handling equipment factory on January 13, 1926. He had just started to speak when someone shouted: "Look at his coat. He's dressed like a nepman. He's living in clover."

Kalinin calmly replied: "Is there anybody from Tver here? They know very well what I used to wear once. I didn't give a thought to coats and stylish clothes. For that matter this coat isn't mine. It's yours, you gave it to me. And did the the right thing, too. It's unbecoming for the president of a

workers' and peasants' state to walk around in a shabby peasant coat and bast shoes."

The frankness of the old Bolshevik, a proletarian, was more than a match for the demagogy of the enemies. The workers wholly identified themselves with their representatives in the state bodies.

In 1927, workers comprised 44 per cent of the USSR Central Executive Committee, the country's highest legislative organ. Representatives of the working class occupied about 50 per cent of the seats in the city Soviets.

Workers were also in charge of city and district Soviets and their executive bodies. For example, a former fitter V. A. Petrov was elected chairman of the Moscow-Narva District Executive Committee in Leningrad; another fitter, A. A. Kiselyov, headed the Volodarsky District Soviet; I. Y. Aristov, a former worker at the Putilov Works, stood at the head of the Petrograd Soviet, and the workers G. P. Pavlov and I. M. Moiseyev guided the work of the Vyborg and Central-City executive committees respectively. The heads of many departments of the Leningrad Gubernia Executive Committee were former proletarians including I. Y. Kotlyakov, F. F. Tsarkov, M. F. Aduyevsky and a representative of the old guard of Petrograd worker-Bolsheviks, deputy to the Fourth State Duma A. Y. Badayev.

With time a large number of workers who acquired considerable experience of state activity as deputies of Soviets were drawn into the state and economic apparatus.

More and more people voted in elections. For example, during the elections to the Soviets in 1926, 1927 and 1928 the number of workers who went to polls increased from 50 to 80 per cent of the total. In 1928/29, the workers of the Katushka factory in Smolensk initiated a competition in the organisation of the best election campaign. The electorate widely discussed the reports of Soviets and drew up the mandates for the candidates.

Besides the Soviets the Party used other forms to draw the working class into the administration of the state. On July 3, 1928, the *Pravda* carried an address of the Party Central Committee entitled "To All Party Members, to All Workers", calling for criticism and self-criticism irrespective of persons. The Central Committee summoned the workers to

take an active part in the fight against bureaucracy and red-tapeism and in the organisation of control over the state machinery. Reports about shortcomings and suggestions how they should be rectified poured into factory committees. The *Pravda* and other papers each week published what were called Leaflets of the Workers' and Peasants' Inspection in which worker-correspondents sharply criticised blunders and mismanagement at industrial enterprises, named those responsible.

Workers were active in various bodies of the Workers' and Peasants' Inspection. In 1928 alone, 2,952 workers took part in the investigations conducted by this body in Kiev, 1,861 in Odessa, 994 in Dnepropetrovsk, 700 in Kharkov, and so forth.

The army of voluntary assistants of the Workers' and Peasants' Inspection increased particularly after the biggest factories set up workers' teams to take part in cleansing the state machinery. The AMO, Dynamo and Serp i Molot factories in Moscow sent several hundred workers to examine the activity of the Supreme Economic Council, the People's Commissariat for Agriculture and the Moscow Regional Finance Department. In Leningrad 1,400 workers' teams were formed at 320 industrial enterprises.

At the end of the twenties and the beginning of the thirties, patronage by industrial enterprises of government institutions, which was initiated by the workers of Elektrozavod factory, became a widespread form of workers' control and participation in the functions of the state machinery. The AMO, Dynamo and other Moscow factories assumed patronage of the People's Commissariats for Finance of the USSR and the RSFSR and their Moscow branches. The workers of the Krasny Putilovets, Elektrosila and the Karl Marx Works in Leningrad patronaged the Leningrad District Finance Department and the Leningrad Union of Consumers' Societies. The Kharkov Electro-mechanical Plant extended patronage to the People's Commissariat for Finance of the Ukraine.

Translating Lenin's behest about the institution of mass workers' control over the state machinery, the patrons helped government institutions to combat bureaucracy and red-tapeism. Factories and the institutions they patronaged concluded

agreements which were widely discussed by factory committees and at workers' meetings. The patrons undertook to send workers' teams to all the major departments of the institutions concerned to regularly check their activity and help in solving urgent questions. Particular attention was paid to complaints from the population. Moreover, the patrons saw to it that a bigger number of former workers were given responsible positions in government institutions.

The Communist Party thought highly of the patronage by industrial enterprises of the government institutions. In a resolution entitled "Promotion of Workers to the Soviets and Mass Workers' Control From Below Over the Soviets (on Patronage by Factories)" adopted on March 15, 1930, the Central Committee and the Central Control Committee of the CPSU(B) instructed all local Party organisations to enhance the patronage of industrial enterprises and to assign them to the care of institutions and organisations which would control the fulfilment of the most important Party and Government directives. This was done. The following figures illustrate the growth of the patronage movement in those years. In February 1930, there were 28 factories in Leningrad which patronaged various institutions; in May, there were 97 and by the beginning of 1931 approximately 200, with over 8,000 activists.

The younger generation of the workers took an active part in this movement. Factory Komsomol organisations formed "light cavalry" detachments (a name inspired by the Civil War) which waged a relentless struggle against thieves, plunderers of public wealth, shirkers and bureaucrats.

Workers' teams which participated in cleansing the machinery of state of alien elements, patronage of various institutions, and "light cavalry" detachments were but a few of the forms of the workers' participation in state administration. The ruling class was the first to follow Lenin's behest that after an eight-hour working day every working man and woman should take part in state activity without remuneration.

The Soviet working class wholeheartedly supported the Government's domestic and foreign policy. Being the real master of the state and bearing full responsibility for its future, it vigorously rebuffed all imperialist intrigues. In the latter half of the twenties, when the imperialists carried out

series of provocations against the USSR, the industrial enterprises resembled disturbed beehives. At numerous meetings the workers adopted resolutions approving the activity of the Soviet Government and the Communist Party. There were massive protest demonstrations of workers carrying posters with the following inscriptions: "The proletariat of the USSR which knows what the true value of the imperialists is will not give in to provocations and will rebuff the imperialist gang of bandits", "Maintain calm, restraint and vigilance. Combat training for the proletariat" and "The bandit plans of Chamberlain and Hicks will crumble against the granite of the USSR".

The workers pledged to raise the productivity of labour, improve the quality of output and strengthen labour discipline. Many industrial enterprises organised *subbotniks* and *voshkresnihs* and the money earned was handed over to the defence fund.

At the suggestion of the workers the Society for Promoting Defence and Assisting the Building of the Aviation and Chemical Industry (Osoaviakhim), set up a people's defence fund of the USSR and named it "Our Reply to Chamberlain". The workers decided to contribute a part of their wages for the construction of a squadron of combat aircraft which they named Krasny Metallurg, Krasny Machinostroi-tel, Tovarishch Artem, Gornorabochi, Tkach, Tekstilshchitsa, Stalnoy Put and Parovoznik. On November 8, 1927, the tenth anniversary of the October Revolution, 30 new aircraft, 18 of which had been built on the money contributed by the workers, were handed over to the Air Force at a solemn ceremony. The collection of money for the fund continued in 1928.

While supporting the peaceful foreign policy of the USSR the working class firmly declared that if the need arose it would fight arms in hand for the freedom and independence of their country and inflict a crushing rebuff to the warmongers. "In the event of an armed clash," read one of the numerous resolutions passed by the workers, "we shall prove that the worker and peasant masses are capable of overcoming the demented imperialists. . . . Woe to the madmen who will dare to encroach on the peaceful labour of workers and peasants in the USSR."

The working class took an active part in the "defence week" which was held from July 10 to 17, 1927 at a time when Britain broke off diplomatic relations with the USSR and the international tension reached its highest point. The "defence week", a very important political campaign in that period, developed into an inspection of the combat preparedness of the working class. Mass defence training was intensified at industrial enterprises: the number of military training circles, first-aid groups and Osoaviakhim detachments increased. Factory workers visited military training camps where they became acquainted with the life and military training of the Red Army men. Military exercises, shooting competitions and other measures were organised. Workers at different enterprises tried to excel each other in the organisation of defence training, assisted the villages which they patronaged to set up combat-training circles, and so forth.

The end of the "defence week" was marked by mass meetings and demonstrations.

A year later a second "defence week" was organised in the course of which the working people showed their achievements in the field of defence training.

The Soviet working class' vigorous efforts to uphold peace and strengthen the country's defensive capacity did much to avert war and created favourable conditions for continuing the socialist transformation of the Soviet Union.

The First Five-Year Plan The directives for the First Five-Year Plan, the plan for laying the foundations of the socialist economy, were discussed at the Fifteenth Party Congress in December 1927. As industrialisation gained in scope the annual tentative plans proved to be inadequate, and it was obvious that it was necessary to draw up long-term plans which would define the main stages and trends in the development of the country's economy.

A year after the Congress the *Torgovo-Promyshlennaya Gazeta* and the *Ekonomicheskaya Zhizn* published the control figures of the five-year plan thus bringing it up for nation-wide discussion in which the working class took a most active part. The workers considered the target figures as a whole and as applied to their enterprises at production conferences, general and Party meetings and at the sittings

of factory committees. Informing the workers of the Dynamo Works in Moscow of their tasks in the five-year plan period, the director said that they would have to organise the production of complex electric motors similar to those imported in the past. The meeting instructed the planning department to take into account the tasks of the enterprise's five-year plan, including the construction of new production premises, housing, kindergartens and a lunchroom, the re-equipment of the old shops, and so forth.

Subjecting the five-year plan to an all-round discussion the workers came forward with important amendments and recommendations. Some said it was necessary to cut investments in capital construction, others argued that they had to be increased, still others thought allocations should be redistributed and criticised the nonconformity of the targets for various shops, etc.

The five-year plan was launched in October 1928. Within five years the working class was to fulfil a task which other countries fulfilled in approximately 50 years. There was to be a 2.8 per cent rise in gross industrial output, including a 3.3 per cent increase in the output of the heavy industry.

Tremendous tasks were set before the power industry workers. In keeping with the plan 42 power stations, including the giant Dnieper Hydroelectric Power Station, were to be commissioned in a period of five years. A large number of mines were to be built both in the old Donets Coal Basin and in the new mining areas—the Urals Area, the Kuznetsk and Moscow coal basins. The oil workers were also set the formidable task of increasing oil production by two times.

It was the metalworkers who were to fulfil the most difficult task. The plan provided for a threefold increase in the output of steel, rolled metal and pig iron and 3.5-fold increase in engineering production. The chemical and the light industries were also to make great strides. All told the plan envisaged the construction of 1,500 large industrial enterprises.

Many thought the plan unrealistic. "There is not enough time, building materials and basic economic resources," they argued.

But dispelling all doubts the Party and working class firmly declared that the tasks of the five-year plan would be ful-

filled. A total of 64,500 million rubles was to be invested into the national economy, or 2.5 times as much as had been invested in the preceding five years.

The Party placed particularly great hopes on workers in the old industrial centres. Some of the most difficult tasks were assigned to the Leningrad workers who produced a quarter of the output of the metalworking industry and almost a third of the chemical industries of the USSR. In those years Leningrad factories manufactured drilling equipment, boilers and turbines for power stations, electric motors, looms, etc. During the five-year plan period some of the biggest factories, including Krasny Putilovets and Izhora works were considerably enlarged and others fully reconstructed. Approximately 40 per cent of the equipment of the Leningrad factories in 1932 was installed in these years. Industrial production in this period increased threefold and the output of the heavy industry rose 4.4 times. Leningrad engineering factories fulfilled the five-year plan targets in 30 months.

"If these figures were brought under the noses of the former factory owners," said S. M. Kirov, "they would have to admit in all truthfulness, that is, if they were capable of being truthful, that in the four years of the five-year plan period the working class did more to promote the industrialisation and technical progress of our country than the manufacturers and bankers managed to accomplish in the course of dozens of years of their rule."

The capital's workers achieved significant successes. The Krasny Proletary and Dynamo works, two of the biggest industrial enterprises in Moscow, increased production several times over. On November 7, 1932, the Dynamo workers reported to the Party's Central Committee that they had built the first two Soviet electric locomotives of the VL (Vladimir Lenin) series. These machines were successfully put through their paces on Transcaucasian and Urals railways and proved to be superior to US electric locomotives, which were considered to be the best in the world at the time but which, nevertheless, failed to negotiate the Surami Pass in the Transcaucasus. In the First Five-Year Plan period a number of enterprises were put in operation in Moscow, including the Sergo Orjonikidze Machine-Tool Works, the Frezer Cutting-Tools Plant and a Ball-Bearing Factory.

Other proletarian centres also made good progress. The Baku oil workers fulfilled the five-year plan in 30 months, and in 1931, the USSR once again became the world's second biggest oil producer.

In the Donets Basin, however, things were not going so well. Despite the efforts of the miners, coal production lagged behind the planned targets. Expensive mining equipment stood idle and coal-cutting machines were not used rationally enough. The situation became especially tense in 1930 and 1931. The mines were not fulfilling the plan. On July 7, 1931, the USSR Council of People's Commissars, the Central Committee of the CPSU(B) and the USSR Supreme Economic Council in a letter "On the Tasks of the Donets Basin Coal Industry" to all Party, government, economic, trade union and Komsomol organisations underscored that the entire country should help raise coal production in the Donets Basin and regard it as a matter of crucial importance for all branches of the economy. The Communist Party and the Government sent fresh reinforcements to the Donets Basin mines. The Communists were the first to learn how to operate the new machines and set an example for the other workers. These measures yielded good results, and by the end of 1931 the productivity of the heavy coal-cutting machines was higher than in Britain and even in the USA, but still below the planned level.

The situation was even more difficult in the iron and steel industry. The southern coal and metallurgical industry, the only one which the country had at the time, and which produced four-fifths of the total output of pig iron, steel and rolled metal, was incapable of ensuring a high rate of industrial development. The annual shortage of metal amounted to hundreds of thousands of tons. On the eve of the five-year plan the Gosplan (State Planning Committee) of the USSR reported a deficit of 1,500,000 tons of pig iron.

Iron and steel production had always been a weak link in Russia's economy. Lenin wrote in 1913: "With regard to iron, one of the most important products of modern industry, one of the foundations of civilisation, one might say, Russia's backwardness and barbarism is particularly great."¹ A country with enormous raw material and fuel resources annually

¹ V. I. Lenin, *Collected Works*, Vol. 19, p. 309.

produced only 30 kilograms of metal per head of population, or one-eleventh of the amount which was produced in the USA.

The natural riches of the Urals Area were exploited since ancient times. Local factory owners, who amassed enormous profits, boasted that all Russians wore crosses made of Urals copper, cooked pancakes in pans made in the Urals and rattled Urals-made five-kopeck coins in their pockets. "The Urals meets the requirements of the entire Russian people," they shouted. The new Russia, however, had other requirements. The plan of socialist industrialisation envisaged the creation of another coal and metallurgical base in the country and the choice fell on the Urals Area and Siberia. The problem of developing the Urals Area and the Kuznetsk Basin was initially advanced in the famous GOELRO Plan. The First Five-Year Plan provided for a tremendous development of the Urals metallurgical industry on the basis of the Kuznetsk Basin coal. Thus the idea of creating a second coal and metallurgical base was being translated into reality.

The first builders arrived at Mount Magnitnaya in the Urals Area in 1929. They lived in barracks and dugouts and their food was rationed. All work was done by hand since excavators arrived only in the following year. There was not even a bathhouse. But they surmounted all difficulties in the knowledge that "Magnitogorsk was the concern of the entire country", to quote the Commissar for the Heavy Industry G. K. Orjonikidze. One hundred and fifty-eight factories supplied building materials and equipment for the project. Posters hung up in the shops of these factories read: "Comrade, you are working on an urgent order for Magnitogorsk. Not a minute's delay. Not a second wasted." Magnitogorsk-bound freight was given the green light on the railways.

The stone-laying ceremony of the works' first blast furnace took place on July 1, 1930. At the same time work was started on the construction of the town of Magnitogorsk and a dam across the Ural River which was built in the record time of less than 150 days.

There were other records, too. Once, Mr. Hartman, a representative of the German firm KASG which supplied boilers for the Magnitogorsk project was surprised to hear that the boilers would be assembled in a building which had no roof

and no window panes. He was even more surprised when a Soviet engineer and a head of a team of fitters said that they intended to complete the assembly in 30 days.

"The KASG firm assembles boilers in 60 days. Don't tell me you want to compete with this world-famous firm."

"Yes," the fitter replied. "We intend to work at a Bolshevik pace."

The boiler was assembled in 25 days.

"The firm is surprised," the German engineer admitted. "It appears that boilers can be assembled just as expertly at thrice the speed."

The first blast furnace at the Magnitogorsk Iron and Steel Works went into operation on February 1, 1932. It was built in 18 months and having a capacity of 1,180 cubic metres was Europe's biggest at the time. Until then the biggest blast furnace in Europe with a capacity of just over 900 cubic metres belonged to the Hösch Plant in Germany. In the USSR prior to the First Five-Year Plan there was not a single blast furnace with a capacity of more than 700 cubic metres. Moreover, the Magnitogorsk furnace was fully mechanised. By the end of 1932, Furnace No. 2 was commissioned. A year later two others were put in operation and in 1933, the Magnitogorsk Works produced more pig iron than all the old metallurgical factories of the Urals Area with their 73 blast furnaces taken together.

The Magnitogorsk giant was completed in record time thanks to the heroic labour of its builders. The whole country spoke of the successes of H. Galiulin's team which was building the dam and exceeded the work quotas by four times—an unprecedented achievement in world practice. It was men like H. Galiulin, N. I. Savichev, G. I. Gerasimov, I. D. Lychak and many others who turned Magnitogorsk into a reliable stronghold of socialist industrialisation.

Siberia, too, became the site of the great battle for metal. Here, in the foothills of Kuznetsk Alatau in the heart of the taiga, the second giant of the iron and steel industry was rising. Chairman of the Supreme Economic Council V. V. Kuibyshev told the chief engineer of the project I. P. Bardin:

"You will be turning a new page in the history of Western Siberia. The construction of the project is a long-range reconnaissance into our country's future which the Party and

the working class is conducting. Your progress will be watched not only in the Soviet Union but abroad, too. You've got to show what the Bolsheviks are capable of doing."

The builders of Novokuznetsk showed what the Soviet working class could do. Andrei Filippov, one of the first builders to arrive at the project, and his team of diggers repeatedly won the challenge Red Banner of the Kuznetsk Project building committee. Mikhail Rogov, who took part in building the Stalingrad Tractor Plant, also came to Novokuznetsk. He was sent there by the Komsomol. His team attained the highest productivity of labour and frequently won first place in all-Union competitions. Recalling those heroic days Academician I. P. Bardin wrote: "Nothing, neither snowstorms, nor rains, could dampen the labour enthusiasm of the workers." And the poet Vladimir Mayakovsky who visited the project described his impressions in verses which became known throughout the country:

*That garden
 shall be blooming,
that city must
 arise
when Soviet Russia
 has such men
as those before my eyes.*

On April 3, 1932, the Kuznetsk Iron and Steel Works produced its first pig iron. The Urals-Kuznetsk combine became operational. The Soviet working class translated the idea of using Magnitogorsk iron ore and the Kuznetsk Basin coking coal into reality.

Engineering was a particularly weak branch of old Russia's economy. In 1913, it accounted for approximately seven per cent of her industrial output. Russia had to import machines and equipment. And so one of the primary tasks of the Five-Year Plan was to eliminate the country's technological and economic dependence on the capitalist states. The rapid development of the engineering industry in the old industrial centres was accompanied by the construction of new enterprises which would enable the Soviet Union to stop importing equipment for the iron and steel and chemical factories, motor vehicles, tractors and combines.

The building of the Uralmash and Novo-Kramatorsk heavy engineering works played a decisive role in the creation of a powerful metallurgical base in the country. The decision to build an engineering plant in the Urals Area was taken as far back as 1927. The Communist Alexander Bannikov, a prominent economic executive and member of the USSR Central Executive Committee, was placed in charge of the Uralmash project. A worker's son, he had fought for the establishment of Soviet power in the Urals Area and later held the posts of Chairman of the Perm City Executive Committee and the Nizhni-Tagil Regional Executive Committee. On July 15, 1928, at a foundation-laying ceremony at the future site of the Uralmash Works, he said:

"July 15 is a memorable day in the history of the Urals Area. On that day it was liberated from Kolchak's bands. Today we are laying the foundation stone of a giant plant and this day will become the birthday of the Urals engineering industry."

The entire country helped build the Uralmash Works. Particularly close ties were established with the Leningrad workers. The Izhora Works sent its pattern-makers, fitters, moulders and smelters to the Urals to help build blooming mills and put them in operation.

The industrial giant in the Urals Area, which had no equal in the country, was completed after five years of intense work. It was put in operation also on July 15. In a special message to mark the occasion the People's Commissar for the Heavy Industry G. K. Orjonikidze noted: "Henceforth a considerable portion of the metallurgical equipment which formerly had to be imported will be manufactured at our own, Soviet, Uralmash Works." In the pre-war period the works turned out 18 large blast-furnace shops, 13 caterpillar excavators, a number of powerful rolling mills, sintering machines, crushing mills and other equipment. Another project designed to help the Soviet Union overcome its technological dependence on foreign countries and do away with the necessity of importing sheet steel was the Novo-Kramatorsk Plant in the Ukraine. In the course of the Second Five-Year Plan period the plant designed and built a sheet mill which was assembled at the Zaporozhstal Works.

The creation of the Soviet tractor industry was launched

following the transition to the collectivisation of agriculture. Over a period of ten years from 1922 to 1931, the Soviet Government imported 86,000 tractors for which it paid the huge sum of 200 million rubles in gold. But 86,000 tractors were a drop in the vast ocean of Soviet fields. If the country did not build its own tractor industry, it would have to export 500 million poods of grain to pay for imported machines. And so at the end of the twenties it was decided to build tractor factories in Stalingrad, Kharkov and Chelyabinsk.

It took months, and sometimes even years to run in the new enterprises; there was a shortage of personnel, experience and knowledge. For instance, it took 18 months to make the Stalingrad Tractor Plant operative and attain its rated capacity. In the first four months of 1931, there were 2,788 breakdowns of machine tools. The American engineers who visited the plant said that the Russians would be unable to master production by themselves. "The Soviet Union would have to resume its purchases of tractors from foreign countries," they said. "But foreign countries might refuse to supply the machines so as to doom the Soviet five-year plan."

The Politbureau of the Central Committee received weekly progress reports from the plant at which members of the Government were frequent visitors. By April 1932, the plant attained the rated capacity and a year later it was producing 180 tractors daily. Drawing on the experience of the Stalingrad Tractor Plant the workers of the Kharkov and Chelyabinsk tractor plants were able to make their enterprises operative and attained the rated capacity with considerably less difficulties.

One of those who took part in building the Kharkov Tractor Plant was Vassily Chernovianenko. He arrived at the project in January 1931 from the village of Ignatovka. The words which he heard at the Komsomol District Committee which sent him to Kharkov became fixed in his memory for ever: "You, Vassily Chernovianenko, as a person who sympathises with the Communists, will as a representative of your village take part in putting 518 factories and 1,040 machine-and-tractor stations into operation." And Vassily, then only 17, went to Kharkov. Gradually he became accustomed to the work at the construction site where the builders, who were anxious to complete the job as quickly as

possible, organised what were called "crash-work nights", "production marches", "and shock-work weeks".

The plant was put in operation on October 1, 1931, but it took seven months to organise production. There was a shortage of workers. Machines broke down and the conveyor would frequently come to a stop. Undaunted by the setbacks the workers persistently acquired the necessary skill. On May 5, 1932, 144 tractors came off the conveyor, for the first time since the plant was commissioned. Thirty-five years later the Kharkov Tractor Plant produced its millionth tractor. On that day the Communist Vassily Chernovianenko, who had spent all these years at the plant, stood at the plant's banner. His service record which took him from a rank-and-file builder to senior foreman is a typical one for a Soviet worker.

As the plant developed, its workers gained in skill and experience. Chief Engineer Valentin Bibik started as a lathe operator. Studying after working hours he finished a school for young industrial workers and then a higher educational institution. Varvara Chmil, who took part in building the plant, acquired a new profession and remained at the enterprise. She was awarded the title of Hero of Socialist Labour. Ivan Smirnov, who was also among the first who came to the plant, started out as a toolmaker. Today he is head of a laboratory at the plant and winner of the Lenin Prize. His two brothers Vassily and Konstantin, his son Vladimir, a design engineer, and his niece Lyudmilla and nephew Vladimir, both technicians, are also employed at the plant.

Families and generations of Soviet workers have bound up their lives with the plant. In old Russia history recorded the dynasties of tsars, now it records dynasties of workers whose whole lives are connected with the Magnitogorsk Works, the Chelyabinsk Tractor Plant and other industrial enterprises. The working class is training its heirs, and their strength lies not in their kinship or in "noble" descent, but in dedicated labour. The new generation of the working class cherishes and multiplies the heroic labour traditions of the thirties.

The vast scope of construction demanded ever more motor vehicles of which there was a tremendous shortage in the country. Nine years after the revolution there were only 20,600 of them. The USSR ranked 35th in the world as

regards their number and 14th for their production. The AMO Works in Moscow manufactured its first ten lorries in 1924. On November 7, they moved across Red Square, their red-painted sides bearing the inscription: "The worker-owner is building an automobile industry which the capitalist-owner did not have." Indeed, in 1914, there were only 10,000 motor vehicles of which less than 2,000 were lorries, in Russia.

On March 4, 1929, the Soviet Government decided to build an automobile factory in Nizhni Novgorod. By April 1930, there were 5,000 builders on the construction site and by the end of 1931, their number had risen to 30,000 of whom 70 per cent were young people. Things were just as difficult here as at the other projects. Workers lived in tents, barracks and dugouts and their diet consisted of pearl-barley soup and porridge. Keeping their spirits up the young workers established a number of communes, pooled their earnings and shared expenditures as they did their joys and sorrows.

The project fostered a large number of Heroes of Labour. One of them was Komsomol member A. Chernyayev, a machinery assembly worker. He wrote a letter to G. K. Orjonikidze requesting permission for his team to assemble the equipment for the wheel shop without calling in foreign specialists. The Yankee traders, he wrote, demanded an exorbitant price. Permission was granted and the young workers excellently coped with the assignment.

"Why don't your workers spare their strength? Why do they work unheeding of time? Nobody pays them for their enthusiasm?" Foreign specialists often posed these questions to Soviet engineers.

There was only one reply: "The worker is the sole master here and that explains his dedicated work and enthusiasm."

The construction of the automobile factory became the concern of the entire country with Moscow and Leningrad, the Urals Area and the Ukraine sending trainloads of equipment. It was put in operation on January 1, 1932 and the workers sent the first column of motor vehicles as a gift to the Seventeenth Party Conference.

The engineering industry made great strides in the First Five-Year Plan period. In 1932, it already accounted for 25 per cent of the gross industrial output. The Soviet Union moved to first place in Europe in the volume of engineering

output. Its share in the world engineering output rose from four per cent in 1928 to 21.4 per cent in 1931. The engineering industry fulfilled the targets of the First Five-Year Plan in three to four years.

Power industry workers also had great achievements to their credit. An historic event in the life of the working class was the construction of the Lenin Dnieper Hydroelectric Power Station, one of the biggest in those years. The workers hurried with their job making the most of each day and hour. At one of the production meetings they undertook to finish the dam by May 1, 1932, seven months ahead of schedule, and to mark this holiday of the working people by putting the first generator into operation. In those years the rates they set themselves seemed fantastic considering that they had to place 500,000 cubic metres of cement. Cooper, head of the team of US technical consultants who had taken part in building the hydropower station on the Niagara, said:

"This isn't serious. They have the same chance of placing 500,000 cubic metres of cement in so short a period as of winning 500 dollars on a dollar ticket."

What seemed to be a dream became a reality. Work went on round the clock. Thirteen thousand Communists and Komsomol members undertook to work a "socialist hour" after completing their shift and thousands of non-Party people followed their example. On May 1, 1932, the 45,000-strong builders collective reported that they had fulfilled their undertaking. The Dnieper Hydroelectric Power Station was put in operation. "Years will pass," wrote its builders, "and the great Soviet land will build still bigger hydropower stations on the Volga and the Angara, but the working people will always remember the grand and magnificent epic of the construction, in the period of the First Five-Year Plan, of the Dnieper Hydroelectric Power Station which today is still the biggest in the world."

By the end of 1932, the output of electricity in the country increased threefold thanks to the power engineers who fulfilled the Lenin GOELRO Plan ahead of schedule.

In the First Five-Year Plan period work was started on the construction of Khibinogorsk, centre of the apatite industry, on the Kola Peninsula within the Arctic Circle.

During the years of industrialisation Soviet chemical workers developed raw material bases in the Khibini Mountains and in Solikamsk in the Urals, completed the construction of nitrogen fertiliser factories in Berezniki and Bobriki, organised the production of sulphuric acid at the Voskresensk Chemical Plant, were working on the problem of developing synthetic rubber. A modern chemical industry was rising in the USSR.

As a whole, the five-year plan was fulfilled in four years and three months. The working class created its own, Soviet industry, by building 1,500 large industrial enterprises in these years. Traffic was opened on the Turkestan-Siberian Railway, metal poured out of the furnaces of the Magnitogorsk and Novokuznetsk plants, the first combines went off the conveyors of agricultural machinery factories in Zaporozhye and Saratov, the Stalingrad Tractor Plant, having overcome all difficulties, had switched to line production. The Kharkov and Chelyabinsk tractor plants were increasing production. The Novotrubny Pipe Works in Mariupol and the Chelyabinsk ferro-alloy factory in the Urals Area were put in operation and the first batch of motor vehicles was manufactured in Nizhni Novgorod. It is impossible to list everything that was accomplished in the First Five-Year period. Newspaper reports about the commissioning of new industrial enterprises were like front-line reports, for the completion of each project was regarded as yet another victory over Russia's age-old backwardness.

At the same time old factories were reconstructed. The director of the old AMO Works in Moscow I. A. Likhachev described the reconstruction of his enterprise in the following words: "We have sewn a new coat to a button." The same applied to the old and new Elektrosila Works in Leningrad and many other enterprises which were reconstructed.

Such were the results of the heroic labour of the Soviet people, and, above all, of the working class.

Competition of the Masses The words "shock-worker", "shock-work team" and "shock-work" were on the pages of all Soviet newspapers in those years.

On January 20, 1929, the *Pravda* carried Lenin's article "How to Organise Competition?". In this article, which was

published for the first time, the great leader of the Revolution, as though he were alive, addressed himself to the working class: "Now that a socialist government is in power our task is to organise competition."¹ These words were filled with a deep meaning and the working class accepted them as a signal to launch a mass socialist competition. Several days later the Komsomol organised an all-Union drive to lower cost price and improve the quality of production. In February, industrial enterprises in the Urals Area and Siberia started a competition for higher production results and the miners of the Donets Basin followed suit. In March and April, almost all industrial enterprises in the country were involved in emulation movement.

The workers of the Krasny Vyborzhets Factory in Leningrad played an exceptionally important role in organising mass socialist emulation. In their appeal to suppliers of raw and auxiliary materials they called upon all the industrial enterprises of the country and not only individual factories as heretofore to join the competition for higher labour productivity, lower production costs and better quality of the output.

All industrial enterprises took up the challenge of the Krasny Vyborzhets workers which was published in the *Pravda* on March 5, 1929. At their meetings the workers called for a more efficiently planned working day, lower rates and higher labour productivity.

The competition acquired a particularly large scope after the Sixteenth Party Conference which summoned all the workers and working peasants to organise competition in all sectors of socialist construction. In its decision of May 9, 1929, "Concerning Socialist Competition at Factories" the Party Central Committee underlined that competition was not a self-praising demonstration of achievements, not an incidental campaign, but a permanent method of work. It warned against regulating and fixing various forms of competition from the top. The Party made it clear that competition and shock-work would make it possible to fulfil and overfulfil the production and the financial plan, heighten labour productivity, lower production costs, improve the quality of the

¹ V. I. Lenin, *Collected Works*, Vol. 26, p. 404.

output, strengthen labour discipline and attain other targets set down in the five-year economic development plan. The shock-work teams, the vanguard of the builders of socialist society in the USSR, concentrated on attaining these objectives. A. S. Filippov in Siberia, Mirsaid Arduanov in the Urals Area, A. K. Gladyshev and A. P. Salov in Moscow, M. Y. Putin and P. N. Slobodchikov in Leningrad and many other shock-workers won country-wide renown for their production achievements.

Early in June 1929, Pyotr Slobodchikov, a worker at the Proletarsky Factory in Leningrad, sent the following letter to the press: "To ensure the fulfilment of the five-year plan it is necessary to establish Industrialisation Day and on that day organise a mass *voskresnik* in which the entire country would take part. Industrialisation Day would be a grand monument to the great leader of the working class V. I. Lenin. . . . I call upon the workers of all other industrial enterprises to respond to my proposal."

The workers responded quickly. On August 6, 1929, they held a mass *voskresnik* to augment the industrialisation fund. Reports about their tremendous political and labour enthusiasm poured in from all parts of the country. More than 500,000 industrial and office workers who took part in the Leningrad *voskresnik* turned out additional production to the sum of four million rubles. Industrial workers and their families and also Red Army units, which were patronaged by various factories, took part in the Industrialisation Day *voskresnik* in the Ukraine. The *voskresnik* in the Northern Caucasus in which 470,000 people participated yielded 1,500 thousand rubles to the industrialisation fund. After the *voskresnik* the workers of Tver unanimously decided to ask the Government to make Industrialisation Day an annual event.

In his time Lenin described the *subbotniks* and *voskresniks* as a great beginning. The All-Union Industrialisation Day organised on the initiative of a rank-and-file worker, a representative of the middle generation of the working class furthered the fine tradition established by his class. P. N. Slobodchikov was 42 when he came forward with his initiative. He took part in the Revolution having joined the Party in 1917 and fought in the Civil War serving as a private in the Red Army from 1918 to 1924. He was also an experienced

worker. This plus his ardent patriotism put him in the vanguard of the industrialisation drive.

In recognition of their services the Soviet Government decorated a large number of Heroes of Labour with the Order of Lenin and the Order of the Red Banner.

The shock-workers initiated all the magnificent undertakings of the working class, including the country-wide drive to fulfil the plan ahead of schedule.

"Let's cut a year off the plan. Five years in four," declared the shock-workers of Lugansk. And this slogan was taken up at many other factories.

Then there was the counter industrial and financial plan. It was first advanced in the summer of 1930 by the shock-workers of the Karl Marx Works in Leningrad. This was done in response to the address of the shock-workers of the Znamya Truda Factory to the Leningrad shock-workers. The address was published in the *Leningradskaya Pravda* on April 9, 1930 under the heading "Znamya Truda Shock-Workers Are Drawing Up an Extended Counter Industrial and Financial Plan". At the time the workers of the Elektrozavod Factory in Moscow were devising counter-plans for the enterprise as a whole and for each of its shops and lathes. Through their participation in the elaboration of counter-plans thousands of workers became acquainted with the organisation and management of production. Many of them acquired an inclination for planning and enrolled at higher educational institutions offering specialised training in this field.

The mass drive of the working class to improve and modernise the organisation of production brought forth another effective form of socialist competition—team cost accounting. Its initiators, the moulders of Lenin Iron Foundry in Leningrad, undertook to lower overhead expenses. In reply to the question: "What made you switch to cost accounting and how did you get the idea?" their team leader replied that the founders went over to cost accounting without even noticing it.

The men knew that many useful materials were wasted due to their own inefficiency. Thinking things over they got the idea of estimating exactly how much material they had to expend. The front-rank workers came to feel themselves the

masters of production and the words "mine" and "ours" acquired an identical meaning for them. According to incomplete figures released by the Central Council of Trade Unions, 84,000 teams switched to cost accounting by January 1, 1933.

Still another form of socialist competition appeared during the First Five-Year Plan period. Called "public tugboat" it commenced in the Donets Basin on the initiative of the workers of the Artem mine. At one of the production meetings the discussion turned to a neighbouring mine whose workers systematically failed to cope with the plan. A veteran worker-rationaliser found a way of helping them. Having once served in the navy he recalled that sometimes it was necessary to tug ships and barges which could not sail under their own steam, and proposed to do the same to the workers of the neighbouring mine who were behind the plan and with whom the Artem miners were competing.

His proposal was approved and shortly afterwards the first "tugboat team" arrived at the backward mine, only to receive a hostile welcome: "You've no business to be here. We can get along without your help. So turn around and head for home."

"We've come here not to chitchat, but to extend comradely assistance," the Artem miners replied. "And we shall stay here until we have fulfilled our assignment."

Assisted by the Party organisation they grouped the foremost workers around themselves and got the socialist competition going. Within a short space of time the backward mine caught up with the plan. At the end of the five-year plan period public "tugboat teams" were operating at many industrial enterprises.

Life confirmed Lenin's words about the organisational abilities of the working class.

Fraternal Solidarity of the Workers

A delegation of Swedish, Norwegian and Danish workers who attended the celebrations marking the tenth anniversary of the October Revolution said it was their duty to express their admiration for the Soviet workers. "Despite numerous wars of intervention, blockades, and so forth," the foreign workers continued, "you succeeded in building out of the ruins and fragments your own industry many of whose branches have surpassed the pre-war level. We are

all the more pleased to state this fact because we have seen for ourselves that the workers have full authority to manage industrial and all other establishments."

The international proletariat viewed the achievements of the USSR as a major contribution to the world revolutionary process. A new slogan was advanced, "Let's render technological and economic aid to the first republic of labour", as the Soviet Union embarked upon peaceful construction.

The international ties of the Soviet workers expanded considerably in the twenties and thirties. Hundreds of workers' delegations visited the USSR and foreign workers, many of whom were members of Communist Parties, worked at Soviet industrial enterprises and construction sites. Of course, compared with the whole working class of the USSR the number of foreign workers in the country was small (as of October 1929, 1,156 foreigners were employed in Soviet industry—452 of them were engineers, 189 were shop foremen and 515 were industrial and office workers), but direct contact with highly skilled people did much to promote the technical know-how of the Soviet workers. Moreover, the participation of foreign workers in socialist industrialisation was a forceful demonstration of proletarian internationalism.

Foreign workers at the construction site of the Magnitogorsk Works took part in putting up the central power station and worked 10-12-hour shifts as did the Soviet builders. The Czechs, the first to respond to the appeal of Y. A. Djaparidze (daughter of one of the Baku commissars who were shot by the British interventionists in 1918) to organise technical training for the shock-workers, instructed several teams of demobilised Red Army men in advanced methods of work.

During preparations for the Ninth Congress of Soviet Trade Unions in 1932, foreign workers at the Kharkov Tractor Plant challenged their counterparts at the Gorky (Nizhni Novgorod) Automobile Plant and the Stalingrad Tractor Plant to socialist emulation. They undertook to introduce not less than three rationalisation proposals and to instruct Soviet workers in advanced methods of work.

German and Austrian Communists at the Kuznetsk project gave a particularly good account of themselves. They tackled the most difficult jobs, had a good knowledge of the tech-

nology and produced output of excellent quality. All workers knew the German Communist Franz Putscher, a repair worker in the mechanical shop. His colleagues characterised him as "highly skilled and exceptionally conscientious, a real shock-worker... who with his family is sincerely dedicated to the cause of socialist construction".

The American worker John Roshton, who took part in building automobile factories in Gorky and Kutaisi settled permanently in the Soviet Union. Another worker, George Tynes, also applied for and was granted Soviet citizenship. R. Robinson, an American, who had received a higher education during the First Five-Year Plan period, worked for many years at the State Ball-Bearing Plant No. 1.

Koos Fis, a Dutchman, worked for 20 years at Soviet industrial enterprises. He arrived in the country in 1922 with his wife Nell and his first meeting with Soviet workers left an indelible impression on him. "When we set foot on the ground," wrote Nell Fis to her mother, "the band struck up the *Internationale*. You know, mother, it never sounded as solemn as it did then. There was a meeting at which the speakers noted that the arrival of foreign workers was very important for Soviet Russia and it would have a political impact on the countries from which we have come. All of us felt that we were being welcomed by the world's first state of workers. At the end of the meeting the band played the *Internationale* again and all of us sang—Americans, Frenchmen, Germans, Hungarians and Dutchmen. There were tears in my eyes... Only now I have come to realise the full significance of our presence here. These impressions shall remain with us for the rest of our lives."

Having decided to link up their destiny with that of the Soviet workers, Koos and Nell Fis devoted the best years of their life to the construction of socialism in the USSR. Koos was one of those who built the iron and steel giant in the Kuznetsk Basin and took part in industrial construction in Kharkov and Novocherkassk. He studied all the time and became an engineer. During the Second World War he was among those who put up new factories in the Urals Area. Nell was a hospital nurse. Koos died in 1943, but memory of him is alive to this day.

The Soviet workers were deeply grateful to the foreign

comrades for their solidarity and support in the building of socialist society, and in their turn gave them enormous political, material and moral support. At the time, in view of the stabilisation of capitalism, the bourgeoisie intensified its offence on the proletariat, and the Soviet workers displaying their adherence to the principles of international solidarity came to the assistance of their class brothers. They helped the striking proletariat of the West, worked for the unity of the world working-class movement, took part in the activities of the Profintern, the International Workers' Aid Organisation and other international proletarian organisations.

Particularly active in those years was the International Workers' Aid Organisation which was headed by Klara Zetkin. Y. D. Stasova was chairman of its Soviet section whose members extended great material assistance to revolutionaries imprisoned in capitalist states. The International Workers' Aid Organisation derived its funds from membership dues, proceeding from concerts, lectures, and so forth. Primary International Workers' Aid Organisations at industrial enterprises organised meetings of protest against the persecution of the striking workers abroad, conducted extensive correspondence and patronaged political prisoners there. By its activity the organisation consolidated and expanded the workers' international ties and increased their responsibility for the fate of the world working-class movement.

During the 1926 general strike declared by workers in Britain in solidarity with the striking miners the Soviet working class headed the campaign of assistance to the striking miners. Attended by thousands of workers factory meetings adopted resolutions of solidarity with the British proletariat. "We know," read the resolution of the AMO workers, "that the bourgeoisie will do its utmost to crush the British proletariat, but the British comrades are not alone in this struggle... We declare that the cause of the British working class is our cause; their victory will be our victory."

The Central Council of Trade Unions started an assistance fund for the British strikers. For seven months, despite their own difficulties, the Soviet workers supported the British miners who continued the struggle even after the general strike. The Soviet workers would not be daunted by the

memorandum of the Conservative Government which demanded that the Soviet Government forbid the Soviet trade unions to help the striking miners. "The blustering demand of the British bankers and stockbrokers," declared all the 12,000 workers of the Krasny Putilovets Plant, "is designed to isolate the miners and deprive them of the assistance of the international proletariat. The Soviet trade unions will see that this does not happen. Nothing can stand in the way of the fraternal solidarity of the workers of the USSR and British miners. The Red trade unions have assisted and will continue to assist the fighting proletariat of Britain." Contributions to the strikers' fund increased from day to day.

The Soviet working class sincerely and unselfishly supported the national liberation movement, protested against the armed intervention of the foreign imperialists in China's internal affairs and took a most active part in the "Hands off China" movement.

A vivid example of proletarian internationalism in action was the five-month struggle of the Soviet working people for the lives of the revolutionary workers Sacco and Vanzetti who were tried and executed by the bourgeoisie of the United States. In the summer of 1927, on the day of their funeral, workers in Moscow, Leningrad, Kiev, Minsk, Tbilisi, Baku and other cities poured into streets to honour their memory. They carried slogans: "Down with bourgeois justice", "Killers of Sacco and Vanzetti be damned", "Long live the world proletarian solidarity".

On many occasions the Soviet workers came out vigorously in defence of the world proletariat. On their behalf the Central Council of Trade Unions transferred considerable sums to the striking building workers in Norway, to the transport workers of Finland, to Polish textile workers and to Indian railwaymen. They wrathfully protested against the shooting of workers in Rumania and Austria.

By supporting and assisting the world working-class movement the Soviet working class won over millions of people to its side. For them the Soviet Union, the world's first state of the dictatorship of the proletariat, was a bulwark on which the working people and the oppressed of the world could firmly rely.

Twenty-Five Thousanders Boldly advancing towards creating a new society the Soviet working class not only built socialist industry, but took a most active part in the socialist reconstruction of the countryside considering it was its class duty to do so.

It was the spring of 1929 and mass collectivisation was under way in the country. Focussing their attention on collectivisation the newspapers carried headlines such as "Speed up the Rates of Collectivisation" and "The Vital Interests of Socialist Construction Call for a Radical Reconstruction of Agriculture". The first patronage societies which regularly assisted villages and rural districts were set up at industrial enterprises as far back as the mid-twenties. In 1927, their membership totalled 1,500,000 people, 60 per cent of whom were workers. These societies carried on extensive cultural activity in the rural areas. They organised courses for the elimination of illiteracy, circulated newspapers and magazines, delivered reports and lectures and helped to build schools, hospitals, clubs, kindergartens and nurseries. The workers helped the peasants to organise correct land management, set up repair shops and develop various co-operative societies and local industry enterprises. Lenin's idea of making "the urban worker an effective vehicle of communist ideas among the rural proletariat"¹ was being translated into reality.

Working-class assistance to the peasantry became particularly crucial during the preparations for mass collectivisation. In the spring of 1929, thousands of patronage teams went to the countryside to take part in the sowing campaign in the course of which they helped establish 275 collective farms in Moscow Region alone, and 254 artels in Leningrad Region.

In their activity the workers' teams relied on large factory collectives. In keeping with the decisions taken by general meetings many factories started collectivisation funds. Tens of thousands of workers participated in *subbotniks* and *voskresniiks* contributing their earnings to the village assistance fund.

¹ V. I. Lenin, *Collected Works*, Vol. 33, p. 465.

In the spring of 1929, competition for higher production results appeared as a new form of co-operation and mutual assistance of the working class and the peasantry. The competition was launched by Moscow workers who challenged the peasants of the Middle Volga Area to socialist emulation. "We summon your region," the workers wrote, "to be in the lead in collective and state farm construction." The appeal evoked a great response among the masses and during the spring sowing campaign alone about 1,500 collective farms were established in the Volga Area.

By word and deed the workers tried to make the peasants discern the advantages of large-scale collective farms. On October 14, 1929, together with collective farm Party organisations they celebrated Harvest and Collectivisation Day on which many collective farms displayed their achievements, many industrial enterprises participated in *voskresnihs* to augment the collectivisation fund. In December 1929, the workers' collectives at the AMO, Dynamo and Serp i Molot factories signed an agreement with the Grain Trust, Collective Farm Centre and the Tractor Centre, pledging their patronage of regions with 100 per cent collectivisation.

At the end of 1929, a new word combination "twenty-five thousander" appeared in the newspapers. Twenty-five thousander was the name given to people whom the Party assigned to administrative posts in the countryside in keeping with the decision of its November 1929 Central Committee Plenary Meeting. Actually there were about 35,000 of them, a legendary workers' detachment which wrote an important chapter in the history of the Soviet working class and the country as a whole. "The leading role of the working class in the collective farm movement," read the decision, "must be consolidated by boldly promoting workers to the posts of organisers and heads of collective farms and the entire collective farm system. This will make it possible to raise the collective farm movement to a higher level and hasten the transition to socialist farming."¹

The registration of volunteers was started immediately after the Plenary Meeting and took place in an atmosphere of great enthusiasm. Naturally, not everybody signed up

¹ CPSU in Resolutions . . . , Part II, p. 652.

for this new and extremely hard job, but the number of volunteers increased daily. "I know," said Golubev, a worker at the Lenin Factory in Leningrad, "that it will be a difficult job and that there will be numerous obstacles which our class enemies, the kulaks, will put in our way. But I am not afraid. We, workers, are used to difficulties and we shall not let them stand in our way now, too."

Vassily Lyukshin of the Moscow-Kazan Railway became the head of the collective farm in his native village shortly after the November (1929) Central Committee Plenary Meeting. "My fellow villagers," he subsequently related, "asked me to become chairman of the collective farm just when the entire country was discussing the Plenary Meeting's decisions. When I returned to report to my Party cell I witnessed an unforgettable picture. The registration of volunteers for work in collective farms had just started . . . and it passed with a great display of enthusiasm."

The Party's assignment was fulfilled within a few days. But applications continued to pour in and reached 75,000. Not only individual workers but complete teams volunteered. In their application the Komsomol members of a shock-work team at the Leningrad Metal Works wrote: "We shall utilise our entire production experience to further socialist construction in the rural districts."

Each application was carefully considered and only front-rank representatives of the working class were accepted. Writing about these people the *Leningradskaya Pravda* called them "representatives of that section of the proletariat which we regard as the core of the working class". Workers of the Moscow Dynamo Works sent 50 of their most deserving comrades.

Seventy per cent of the people whom the working class delegated to work in the countryside were Communists and another ten per cent were Komsomol members. Approximately fifty per cent of them worked in industry more than 12 years, and only 13 per cent had a five-year service record. The majority were under 30 years of age. The new generation proved worthy of their fathers and elder brothers, and like them carried on the socialist revolution at the end of the twenties and the beginning of the thirties eliminating the last exploiter class in the country. In May 1930, twenty-

five thousanders were in charge of a fifth of all the collective farms. Drawing on the experience of industrial enterprises, they introduced the piece-rate system at collective farms, bolstered production discipline, organised socialist competition and in practice strove to make the peasants see the advantages of the collective farm system.

With inherent proletarian insight enabling them to discern what was right and what was wrong they did a great deal to rectify the errors in the collectivisation drive. Reporting to their enterprise the workers of the Moscow Dynamo Works wrote that there were almost no cases of the socialisation of small cattle and poultry in areas where they were in charge of the collectivisation. The decision "On Measures to Combat Distortions of the Party Line in the Collective Farm Movement" adopted by the Central Committee of the Party on March 14, 1930 helped the twenty-five thousanders to correct the errors in the collectivisation movement and in dispossessing the kulaks.

Justly regarding the twenty-five thousanders as a force to be reckoned with, the kulaks, these class enemies, resorted to arson, killings, provocations and sabotage. And, as during the Revolution, the foremost workers did not spare their lives to further the great cause of socialist construction.

Things were most difficult for the twenty-five thousanders in the former border areas of tsarist Russia where the class struggle was aggravated due to local national features. The collective farm movement encountered the combined resistance of the rich peasants, the mullahs and the *basmachi* who intimidated the illiterate poor peasants and prophesied that not even death would save them from punishment. Leftist deviators added grist to their mill. The Leningrad workers who assumed patronage over Turkmenian villages recalled the following incident: on their way to a village late one evening they met a representative of the District Executive Committee. They knew the man and greeted him.

"What's the hurry?" they asked.

"I've got to get to the village and set up a collective farm there by nine in the morning."

"You're a fast one, aren't you? And what if the villagers don't want a collective farm?"

"They'll want it all right," the man replied. "I'll see to it that they either join the farm or move to live in the Kara Kum desert."

The workers had no alternative but to intervene and prevent the man from violating the principle of voluntariness in the collective farm movement.

The women of Central Asia are eternally grateful to the workers' representatives who helped them throw off the loathed black veil and age-old oppression. Thousands of women of the East discarded the black veil once and for all, enrolled at women's courses and acquired equal rights with the men. Though the bandits hanged many of those who dared take off the veil, they were helpless to stop the "Freedom for the Woman of the Soviet East" movement. Besides helping to set up collective farms in Central Asia, the twenty-five thousanders brought freedom to Turkmenian, Uzbek, Kazakh women.

The twenty-five thousanders who were sent to work in other national areas also won the respect of the local population. In Bashkiria, for example, workers from the Karl Marx Works in Leningrad helped to establish a state farm in the virgin lands area. Former turner P. I. Vetrenok who was in charge of one of the farm's departments recalled that after the first harvest was taken in, a delegation of cattle-breeders in their finest national attire came to the farm. It was headed by an old grey-bearded Bashkir.

"You brought happiness to our ancient steppe," he said. "Nothing ever grew on it except patches of dry grass for our mounts and sheep. Now we know what our land is capable of producing. We, too, shall grow wheat. Help us plough the steppe and we shall till it collectively like the Russian peasants are doing. You shall have our eternal gratitude."

Judging by the results of the election meetings held at the collective farms in 1931, the workers earned immense prestige in the rural districts. The twenty-five thousanders lived up to the trust placed in them by the Party and the working people of the Soviet Union.

By the summer of 1931, more than 18,000 workers were still active in the collective farm system out of the 35,000 who were sent to the rural districts in 1930. This drop was

due to several reasons: some returned to the cities to study or were recalled to their factories, others had fallen ill and still others were killed by the kulaks.

When the Party sent the twenty-five thousanders to the villages it intended them to work there from one to three years. In this period they trained replacements out of the collective farm activists who would continue the work they had started. Many workers, however, decided to remain in the countryside. One of them, V. F. Lyukshin, subsequently recalled:

"In 1932, I, too, received a paper. It came from the administration of the Moscow-Kazan Railway. They wrote that the twenty-five thousanders fulfilled their mission and that the collective farm system was established in the country. I was offered to return to my former place of work. And indeed, I could go back to my old job and my old comrades knowing that I had fulfilled my duty. A part of the twenty-five thousanders, mainly those whose families remained in the cities, returned to their old job. But I decided to remain. My family was with me, and most of all I wanted to see the results of my work, for I had become firmly attached to the collective farm."

By the end of the five-year period, about 40 per cent of the twenty-five thousanders were still working in agriculture. They were the people who helped to establish the collective farm system once and for all time.

In Quest of Knowledge The drive for universal literacy acquired unprecedented proportions at the end of twenties and the beginning of the thirties. To train the vast number of skilled workers essential for the further socialist industrialisation and rationalisation of production it was necessary to raise the general cultural level of the working class and first and foremost to eliminate illiteracy.

"Down with illiteracy", "Launch a drive for knowledge", "Deprive the enemy of his last weapon"—these slogans were just as popular as the appeals to hasten socialist construction.

By 1929, the percentage of illiterate workers had dropped to 13.9; 8.1 per cent of the men and 26.6 per cent of the women were illiterate. At the time the difference in the

educational level between men and women, a leftover from tsarist times, was still in evidence. But there was another important factor which had to be taken into account. The selective census conducted in 1929 showed that the cultural level of the workers in individual industrial centres was lower than in others.

Illiteracy among Leningrad metalworkers was 2.8 per cent, among the metallurgists of the Urals Area—14.2 per cent, among the miners of the Donets Basin—15.2 per cent, among the workers of the Moscow Region cotton industry—21 per cent and among the Azerbaijan oil workers—25 per cent. The educational level was the lowest in the Baku oil province, whose population consisted of a large number of nationalities, and also in the textile industry of Moscow, Ivanovo and Leningrad regions.

To deal with the intolerable situation when one out of every four or five workers employed in key industries could neither read nor write, the Party Central Committee on May 17, 1929 adopted the decision "Measures to Eliminate Illiteracy" in which it proposed a drive for universal literacy.

The appeal was eagerly taken up at all factories. Workers' meetings passed decisions to teach all the illiterate and to organise competitions between the participants in the cultural drive. The cultural workers of the Bauman District in Moscow and in the town of Saratov initiated a movement under the slogans: "Each literate person teaches at least one illiterate" and "Let us turn our factories into enterprises with 100 per cent literacy".

Workers who joined what was called the cultural army successfully tackled the immense job of registering all the illiterate and semi-literate people and enrolling them in literacy schools.

The cultural drive assumed still greater proportions after the Sixteenth Party Congress. It took place in 1930 and emphasised that the elimination of illiteracy should be regarded as one of the prime prerequisites for the promotion of the cultural revolution in the country. In November 1930, 40 regions participating in the cultural drive signed a general agreement setting the time for the elimination of illiteracy. A bicycle factory in Kharkov which first reported that illiteracy among its workers and their families had been fully

eliminated won the challenge Red Banner of the All-Ukrainian Council of Trade Unions.

In May 1931, Leningrad, which had a 23,000-strong cultural army, was proclaimed the first city with 100 per cent literacy. Illiteracy was completely stamped out at all its enterprises. Other industrial centres were not long in reporting that they too had completed their campaign against illiteracy. It was a great victory not only of the workers of the cultural army but also of a great number of illiterate workers who overcame their backwardness and ignorance. Many of them found it extremely difficult to enter a classroom for the first time in their life. Recalling this period in his life, A. S. Filippov, one of the foremost shock-workers of the Kuznetsk project, said: "I was 38 when I had my first lesson at the school for the elimination of illiteracy. In the beginning I found it more difficult to hold correctly a pencil than to wield a spade. I could work a whole shift and my shirt would remain dry, but I certainly sweated during lessons. But I learned to read and write although there was precious little time left for sleep. And when at last I managed to spell out newspaper reports I felt as if I had been born for the second time. It was though a blind had been ripped off my eyes. I doubt whether a student who gets his diploma today has ever felt as happy as I did then."

By the end of the First Five-Year Plan period, illiteracy had in the main been abolished. But more had to be done. To ensure the uninterrupted reconstruction of the industry the workers had to continue studying in order to raise their level of general education and technical knowledge. In 1929, the majority of the workers were enrolled in schools with a three and a half year curriculum. Even the Leningrad metalworkers, the most advanced contingent of the working class, went to schools whose programme was designed to last not more than four and a half years. In these conditions it became increasingly important for the workers to study after working hours.

In response to the slogan "From the work bench to the school desk, from the school desk to the work bench" the workers willingly attended schools for adults with one-, two- and three-year curriculums. Schools for the semi-literate, two-year courses and three-year special schools for fac-

tory personnel considerably raised the general educational level of the workers. They acquired still greater knowledge in workers' universities which were established in 1926/27 and were the highest stage in the system of workers' education. They differed from the three-year schools in that beside a general education they gave the workers technical knowledge. They prepared medium-level specialists such as first-grade technicians, economists and economic planners. Starting out with an enrollment of only a few thousand, the workers' universities developed into mass workers' schools by the end of the First Five-Year period. "The workers' universities," to quote Nadezhda Krupskaya, "are schools of a new type whose appearance had been dictated by life itself. They give knowledge to working-class cadres who are engaged in production and are moving it forward."

The working class simply soaked up knowledge. "Without knowledge it is impossible to build up production," they used to say and studied with still greater persistence at schools, courses and diverse circles. It were the shock-workers, the foremost contingent of the working class, who naturally set the pace in this quest for knowledge.

As far back as 1927, the young workers of the first shock-work team to be formed at the Proletarsky Works in Leningrad decided to overtake the foremost skilled workers by putting their knowledge to practical use.

The young workers studied with a will. In the evening, when young men and women in the industrial suburb danced to the music of the accordion, the tireless members of the shock-work team with textbooks tucked under their arms hurried to the technical courses where they were taught the technology of metals, resistance of materials, assembly of locomotives and boilers, draughtsmanship and mathematics. They achieved their objective.

One day the shop's chief engineer said that the youth team made much better ash-pits for locomotives than those turned out by the adult workers. The quality of the rivetting was considerably higher.

Nevertheless, at the end of the twenties, the workers strove to attain only the most elementary knowledge, since their initial educational level was extremely low. Even the shock-workers, the vanguard of the working class, lagged behind

the necessary level of education. A questionnaire circulated at the First All-Union Congress of Shock-Teams disclosed that approximately 40 per cent of the delegates had only a primary education. A mere ten per cent were enrolled at secondary schools and another ten per cent attended factory apprenticeship schools or already finished them.

Factory apprenticeship schools appeared shortly after the October Revolution and by the beginning of the industrialisation there was one at almost every factory. They were open to workers who had studied from four to seven years in a general education school.

Many workers who finished factory apprenticeship schools enrolled in technical schools. In 1926, 75 per cent of the graduates from factory apprenticeship schools became industrial workers, the remainder continued their education.

An overwhelming majority of the young workers acquired a trade directly at their enterprises. With the establishment of Soviet power the position of a factory apprentice changed drastically. He was no longer an errand boy. His team leader or foreman was also responsible for his training. In those days there was a large number of special courses and production circles where workers could raise their professional skill and improve their technical knowledge.

The Party organised a mass drive for mastering technical knowledge among the workers. Many enterprises organised "technical-study days".

By the middle of 1931, there were a number of industrial enterprises and particularly construction sites where from 80 to 90 per cent of the workers were attending various technical study circles and courses.

All workers studied, some at the literacy schools, others at technical courses and still others in production circles.

Apart from skilled workers the industrial enterprises needed engineers and technicians of whom there was a great shortage in the country. In 1927, there were only seven engineers with a higher education per 1,000 workers compared with 40 in the advanced capitalist states.

The socialist production had to have specialists of working-class origin who would energetically and creatively carry

the Party's policy into life. In 1929, there were only 139 engineers who were members of the Communist Party in the country's industry. The problem of training Communists for command posts in industry in the period of the reconstruction of the national economy had to be solved with considerable urgency.

The Soviet technical intelligentsia was formed out of the most talented workers and trained at higher and specialised secondary educational establishments. Preparatory workers' faculties which were opened at institutions of higher learning as early as 1919 played an important role in the training of engineers and other technical specialists. By 1926, there were 113 workers' faculties with a student body of 43,300. By modern standards it was a small figure but an impressive one for those days. In the first two years of the industrialisation drive the workers' faculties prepared 15,000 students, all of them workers or peasants, for entry into institutions of higher learning.

The Communist Party and the Soviet Government took care that workers received the greatest chances of entering higher educational establishments. On April 13, 1927, the Party Central Committee adopted a decision "On Improving the Social Composition of Students Entering Institutions of Higher Learning, Workers' Faculties and Technical Schools" which provided for additional privileges to the workers. As a result, already that year they made up 56.4 per cent of the students taken into industrial-technical institutes.

At its Plenary Meeting in July 1928, the Party Central Committee decided to send not less than a thousand Communists, all of them with a thorough grounding in Party, governmental and trade union activity, to study at institutions of higher learning, and to open more workers' faculties, technical schools and institutions of higher learning.

Upon completing their course of study, these "Party-thousanders" and "trade union-thousanders", as they were called, returned to their enterprises. Former workers of the Vladimir Ilyich Works A. S. Chernikov, M. T. Deyev, S. M. Moskalenko and D. I. Panov returned to their enterprise in the capacity of engineers. Shop superintendent S. M. Moskalenko became chief engineer of the Works. In

1930, Maxim Elyansberg, a former turner, became chief designer at the Sverdlov Works in Leningrad. A year earlier, the Party Central Committee appointed a former electrician Mikhail Zhukov, a graduate of the Industrial Academy, director of the Dynamo Works.

In 1933, 64 per cent of the specialists in industry were young people trained in the period of the First Five-Year Plan. About a third of the specialists with a higher education and approximately half of the specialists who finished technical schools were former workers.

In its determination to raise cultural standards the working class concentrated on raising the educational and professional and technical level of the workers and also conducted extensive cultural and educational work among the people. Palaces of culture, recreation and reading rooms and workers' clubs at industrial enterprises became genuine centres of culture. There were various study circles, drama, sculpture and painting groups and amateur orchestras.

Lenin Komsomol theatres were opened in Moscow and Leningrad on the basis of workers' amateur art circles. Workers flocked to these theatres and took part in setting the stage and making the scenery.

Workers' clubs conducted intensive atheistic propaganda in which Komsomol members played a most active role. The workers were fond of their clubs and did a great deal to make their activities still more interesting.

During the industrialisation period the number of clubs in the country increased considerably, from 3,500 in January 1, 1926 to 5,000 by the end of the five-year plan.

The Soviet press played a tremendous role in raising the cultural standard of the workers, whose interest in newspapers, magazines and books mounted from year to year. Factory newspapers which developed on the basis of wall newspapers became particularly popular. They carried articles dealing with the most crucial issues of factory life, put slackers and habitual latecomers to shame and lauded shock-workers. Poets and writers considered it an honour to write for the factory newspapers. Their poems, sketches, epigrams and satirical articles inspired the workers to intensify their efforts to fulfil the plan and build up a new socialist culture.

In those years the poet Vladimir Mayakovsky wrote the words to *The March of the Shock-Work Teams* and the Hungarian writer Antol Hidas wrote the words to a song about the shock-workers which gained immense popularity. Praising the Soviet worker and his unfettered labour Soviet writers wrote books in which the principal hero was the working class. The working class also produced its own writers and poets including such well-known ones as Y. Libedinsky, B. Gorbатов, A. Avdeyenko and A. Zharov. It is impossible to list all of them.

The first books on the history of the country's factories also appeared in those years. In response to Maxim Gorky's appeal: "Workers, you have built factories, now you must write their history", editorial staffs were set up at factories to prepare for this great undertaking in which the Komsomol members, activists and shock-workers played a most active role.

The First Five-Year Plan was a turning point in the cultural revolution. The working class scored yet another victory, this time on the cultural front.

The End of Unemployment

When industrialisation started there were a million unemployed in the country. The Fifteenth Party Congress said that unemployment was one of the most serious problems facing the people and one which could be solved only on the basis of socialist industrialisation. Nonetheless, unemployment continued to exist during the first three years of industrialisation despite the fact that the number of employed industrial workers steadily increased. In 1927/28, approximately 9,000,000 people in the rural areas were without jobs, and each year up to 1,500,000 peasants arrived in the towns to form the reserve of the army of the unemployed.

In contrast to unemployment in capitalist countries where it is caused by the curtailment of production and dismissal of industrial workers, unemployment in the latter half of the twenties in the USSR persisted despite the growth of production and the increase in the number of employed workers. Unskilled workers, many of whom had never worked for hire before, made up the bulk of the unemployed. As regards the group of jobless industrial workers who made

up from 15 to 17 per cent of the total number of unemployed, it was engendered by the manpower turnover. Its existence was of a temporary nature, for already at that time the Labour Exchanges in Moscow, Leningrad and the Urals Area, due to a general shortage of skilled personnel were unable to meet the requirements of the industrial enterprises for workers of a number of specialities.

Nonetheless, unemployment was an acute social issue which the Soviet people were determined to solve.

The state and the trade unions were steadily increasing allocations to fight unemployment. In the first three years of the industrialisation they rose by almost 2.5 times to reach 146 million rubles (in 1924, they amounted to 22.3 million rubles). At the suggestion of the trade unions workers at many industrial enterprises contributed one per cent of their wages to the unemployment fund, and, in keeping with the decision of the Moscow Party Committee, the Communists gave up to 30 per cent of their literary fees and from four to 16 per cent of their earnings if they exceeded the maximum fixed for the Party members. Just as during the rehabilitation period a number of privileges were granted to the unemployed including a fifty per cent cut in rent and in the cost of boat and railway fares, meals at a reduced price or completely free of charge and also tickets to cinemas and theatres.

The Soviet Government encouraged the growth of production and labour collectives which appeared on the basis of idling small enterprises and workshops. With the assistance of the local authorities, the trade unions and the public, the unemployed restored and put such enterprises in operation. People making up these collectives received a wage, though a smaller one than at the operating enterprises. In 1926, such collectives totalled 90,000 people; in 1928, there were about 2,000 collectives providing employment for 135,000 people.

The unemployed built roads, laid out parks and gardens, swept the streets and drained swamps. The volume of this sort of work also steadily increased and the aggregate wages paid out to the workers rose from 4.3 million rubles in 1926 to 5.4 million in 1927.

The course towards industrialisation confronted the Com-

missariat for Labour with another problem, that of retraining the unemployed. The rationalisation of production wrought substantial changes in the professional structure of the working class: some occupations became obsolete, while the demand for workers of other occupations, particularly those connected with the mechanisation of production, increased steadily. Having acquired a new trade at special courses operated by Labour Exchanges, the Central Institute of Labour and industrial collectives, workers were taken on by factories at whose request they had been trained. The retraining of workers became one of the most important forms of fighting unemployment.

Undoubtedly all these measures played a considerable role in decreasing unemployment but they could not banish it completely. It became possible to start an effective struggle against unemployment only with the launching of the First Five-Year Plan which envisaged an almost 4,500,000 increase in the number of workers.

"We appeal to all the workers," declared the unemployed of Kharkov, "to do the utmost to help the Party fulfil the five-year plan for the development of our economy and improvement of production. Only your consistent active participation in the five-year plan will cause a decrease in the unemployment and we shall be able to return to our factories and together with you go ahead with the construction of socialism."

The workers replied briefly and to the point: "Five-year plan in four years. Let us draw new personnel into production."

More and more workers were needed to keep up the sweeping pace of socialist construction which turned the country in a vast construction site. The first demands for more workers came from the Donets Basin, the Urals Area, Siberia and the Khibiny mountains. For the first time in many years the People's Commissariat for Labour of the USSR in its analysis of the situation on the Labour Exchange was able to note: "In 1928/29, the situation on the Labour Exchange compared with the previous years shows a tendency towards a sharp decline in the growth of unemployment."

Drastic headway in the fight against unemployment in the

USSR was achieved in 1929, the year when a general crisis beset the capitalist world. By the end of 1929, the Collegium of the People's Commissariat for Labour announced that "the last quarter of the year has been characterised by serious difficulties in supplying the national economy with all the manpower it needs in view of its inadequate reserves". This was the first official document recording manpower shortage. In 1930, unemployment began to decline: in April, there were 850,000 unemployed, in June, 579,000, in September, 376,000 and in October, 226,000. The number of skilled workers without jobs also dropped sharply from 143,000 in April to 119,000 in June, 75,000 in September and 47,000 in October. These figures do not include boys and girls under 18 years of age who were due for the autumn enrollment in factory apprenticeship schools. In its annual review the People's Commissariat for Labour pointed out that "in view of the rapid industrial development and the growth of the collective farm movement, the second year of the five-year plan has put an end to unemployment".

On October 9, 1930, it passed a resolution authorising the immediate placement of the unemployed and a stop to unemployment grants. Each person was given the right to work and Labour Exchanges had jobs for all.

On September 7, 1931, the fourteenth anniversary of the October Socialist Revolution, the *Pravda* front-paged the following announcement:

"Proletarians! Workers of all countries! Today in the squares, at meetings, demonstrations and rallies you will sum up the results attained by two economic systems—capitalism and socialism.

"Remember!

"In the capitalist countries:

"Tens of millions of unemployed. The deepening world crisis. Thousands of bankruptcies, tens of thousands of closed enterprises. Growing poverty, hunger and plunder of the colonies. Preparations for fresh imperialist wars.

"In the country which is building socialism:

"Powerful growth of industry. No unemployment. Creation of large-scale mechanised agricultural production on the basis of state and collective farms. Improving material conditions of the working people. The rallying of the

working people around the Bolshevik Party and its Leninist Central Committee."

A day earlier the Executive Committee of the Communist International in an appeal to the working men and women of all countries underlined that the Soviet Union was the only country in the world which had no unemployment. Such was the actual state of affairs, for by the beginning of the thirties the Soviet working class had eradicated capitalism's greatest evil, the cursed heritage of the past—unemployment. But in the capitalist countries there were 37 million jobless at the time. Crushed with despair and aware of the hopelessness of their situation many people, some who had large families to feed, committed suicide.

A delegation of US workers who arrived in the USSR for the festivities marking the fourteenth anniversary of the October Revolution said that out of 10,000 metalworkers in their country only 2,050 are employed and even then they worked a three-day week.

"I'm willing to accept any job." These words were heard in the streets of New York, Boston, Detroit, London, Manchester, Liverpool, Paris, Lyons, Toulouse and many other cities of the capitalist world.

The Soviet people, who were themselves accustomed to difficulties and privations, were amazed at what they saw in the countries of the capitalist West. A *Pravda* correspondent reported: "We are in the flat of an unemployed building worker Walter P. He lost his job in 1929. We talked to his wife, a woman of thirty who looked all of fifty. Crying bitterly she told us: 'In these years I've lost thirty-five pounds in weight and my husband fifteen. The children hadn't seen a drop of milk and we are glad when there is some bread in the house. Our only food is potatoes and, very rarely horseflesh. The children are in rags and soon they'll have nothing to wear at all.'"

Paralysed by the general crisis the capitalist world frantically tried to save itself by launching preparations for a new imperialist war, mounting an offensive against the proletariat and sopping the colonies of their lifeblood. But the crisis continued. Blast furnaces stood idle, mines were flooded and thousands of tons of finished products were dumped into the sea. In search of a livelihood, "redundant"

people moved from city of city, from country to country. According to figures published by US charitable institutions, in 1932, there were from 35 to 40 million people who had no means of subsistence and needed help.

At the same time the Soviet Union had told the whole world that the first country of the dictatorship of the proletariat had wiped out unemployment.

Labour Exchanges closed down and notices appeared on factory gates informing that there were jobs for skilled and unskilled workers.

The end of unemployment in the USSR was a great socio-economic victory of the Soviet system, a victory of world historic significance.

From 1928 to 1932, the number of industrial and office workers increased from 11.5 million to 22.9 million. In this period the number of industrial workers rose from 3.1 million to 6.3 million, a figure considerably higher than envisaged in the First Five-Year Plan. As a result unemployment was wiped out much faster than expected. Moreover, the development of the collective farm system helped reduce the agrarian overpopulation.

Having never experienced the horrors of unemployment, young people in the Soviet Union might be inclined to think that this major achievement of the working class came of its own accord. But it did not. The banishment of unemployment was the result of the gigantic creative activity of the victorious proletariat which is building a new society under the guidance of the Communist Party. The worker-master successfully solved the problems which the capitalist-master would never had been able to solve.

A Leningrad shock-worker Kozakevich, who was awarded the Order of Lenin for his dedicated labour in 1931, said:

"Retracing the road we have covered, we sometimes ask ourselves: why are we developing so rapidly? And the answer that we give ourselves is that this is happening because we, the workers, are the masters of our land. . . . Our profound consciousness and understanding of historical tasks, deep confidence in victory and unwavering loyalty to the Party of Lenin—that is what enables us to promote the rapid growth of the economy and culture in the USSR."

THE DECISIVE STAGE OF SOCIALIST RECONSTRUCTION (1933-1941)

Towards New Horizons The First Five-Year Plan was successfully fulfilled, and the joint Plenary Meeting of the Central Committee and the Central Control Committee of the CPSU(B) which met in January 1933 characterised it as a stage on the road to further progress. A broad and purposeful programme of capital construction was drawn up for 1933 under which maximum investments were channelled into projects that were nearing completion to speed up their commissioning. Large funds were allocated to eliminate the building defects at the already functioning enterprises. All these projects received top priority in the supply of building materials, equipment, transport facilities and personnel.

Besides enlarging the scope and scale of capital construction it was necessary to instruct the workers how to handle new machinery. This was an essential task, for the fixed assets of industry were developing rapidly and by 1940 had increased 3.4 times as compared with 1932. A real industrial revolution based on scientific and technological progress was swiftly gathering momentum in the country. The reconstruction of the economy called for what in those days was described as the reconstruction of the brains, reorganisation of the psychology, improvement of the methods of work and a sharp rise in the cultural and technical level of the masses. While the lag in earthwork could be overcome by employing more workers, introducing overtime and holding *voskresniks*, these methods would not help the workers to master auto-

matic machine tools, conveyor assembly methods and line production.

One of the participants in the Plenary Meeting recalled the following incident: the director of the recently built Stalingrad Tractor Plant asked one of the young workers to measure the length of a machine component, and he did so... with his fingers because he did not know how to use a measuring instrument.¹ Such cases were not infrequent.

It was obvious, therefore, that one problem engendered another. The industrial revolution was inconceivable without a cultural revolution, for in order to master the new machines millions of people first had to acquire the rudiments of culture. At the same time the cultural revolution could be accomplished only on the basis of a powerful industry, a developed paper and printing industry, engineering and other crucial branches of production.

The shortage of skilled workers and engineers and the need to raise the cultural standard of the broadest masses of people with the utmost speed led to the appearance of schools for adults, various vocational technical courses and industrial academies which had never existed before.

Industrial enterprises set up a dense network of technical courses, seminars, study circles and various schools which were attended not only by beginners, but also by veteran workers and the managerial personnel. The system of technical education organised by the trade unions in 1933 involved 600,000 workers.²

Another method of helping the workers to master new equipment and technology was the passing of public-technical examinations. It was initiated by the Komsomol and won widespread popularity, because the workers themselves took part in checking the professional knowledge of their comrades.

The inadequate training of a considerable portion of the workers was just one of the difficulties. Economic development was impeded also by miscalculations in industrial

¹ *Materials of the Joint Plenary Meeting of the Central Committee and the Central Control Committee of the CPSU(B), January 7-12, 1933*, Russ. ed., Moscow, 1933, p. 109.

² *Seventeenth Congress of the CPSU(B). Verbatim Report*, Russ. ed., Moscow, 1934, p. 242.

organisation and planning. The following facts illustrate this point. The Aktyubinsk Chemical Works which was scheduled to go in operation early in 1933 was unable to start production even a year later because not one of its shops had been completed. The Central Board of the Chemical Industry (Glavkhimprom), however, kept on sending daily instructions to deliver... the finished products. State and collective farms waited in vain for Aktyubinsk fertiliser. Thus, unrealistic planning led to disproportions in the development of the affiliated branches of production and enterprises, particularly in the rates of development of the iron and steel industry, and metal-intensive branches. From 1928 to 1932, steel output increased 40 per cent whereas the output of the engineering and metalworking industries increased 300 per cent.

Another formidable obstacle preventing the new enterprises and shops from attaining the rated capacities were so-called construction defects left behind by the builders. Sometimes this term was used to camouflage serious deficiencies in technology.

Difficult as they were, the conditions in industry were further aggravated by the tense food situation, particularly by a shortage of livestock products. Gloating over the problems confronting the Soviet Union, its enemies did their best to distort the actual state of affairs.

The Party and Government took steps to improve the food supply of the workers and the factories established a large number of subsidiary farms, which had 166,000 head of cattle and 267,000 pigs by the end of 1933. They also produced 1,200,000 tons of potatoes and vegetables which were issued to the workers in addition to their food rations. Shock-workers were entitled to higher rations.

The difficulties facing the country had a detrimental impact on industrial production. In 1933, the increment in the socialist industry was a mere five per cent, the lowest since the end of the Civil War and foreign intervention. But there was the encouraging factor that the enormous efforts made that year enabled the Soviet industry to make a giant stride forward and increase its output by 19 per cent in 1934. In 1935, industrial production rose by 23 per cent. On the whole, in the course of the Second Five-Year Plan

period industrial production rose 2.2 times (the target was 2.1 times).

The period from 1933 to 1940 was characterised by the commissioning of new factories, the mastery of new technology, enhancement of the organisation and effectivity of labour and steady technological progress. Particular attention was focussed on the improvement of the qualitative indices (lower production costs and higher labour productivity). When the Great Patriotic War broke out the Soviet Union was a mighty industrial power.

Numerical Growth of the Working Class

In the course of the Second and Third Five-Year Plan periods the Soviet Union's working class increased by 8.6 million people, or 38 per cent. This rate of growth was slower than during the First Five-Year Plan period, and the number of building workers even declined. At the same time the volume of production and building increased rapidly and from two to three times as much money was annually invested than during the First Five-Year Plan. This was the natural outcome of the steady expansion of the new production and technical basis and the rising productivity of labour. This process was especially rapid in the building industry which in the course of the pre-war five-year plan periods developed from a seasonal, semi-artisan trade into a modern branch of the economy. As an advanced building industry came into being the share of unskilled labour in it declined sharply.

In 1940, an estimated 61.1 per cent of the industrial and office workers were employed in the sphere of material production, that is in industry and building, in the transport system and agriculture (state farms and machine-and-tractor stations); 31.2 per cent (22.5 per cent in 1932) were employed in the non-productive sphere; 5.7 per cent in state and economic administration, and two per cent in other fields.

During the First Five-Year Plan period, the most difficult one, it was necessary to channel less funds than necessary into the development of the communal services so as to be able to draw the bulk of the labour resources into industry, building and transport. Another shortcoming was that there was still not enough shops and other trading establishments, schools and hospitals to meet the growing demands of the

old and the new centres of industry. But from 1933 to 1940, the state was able to pay more attention to the development of the communal services, a factor which wrought a change in the structure of the working class.

Another very significant change was: the drop in the number of domestic servants and day labourers. These groups were politically the most backward sections of the working class. They were the least active in public affairs and received the lowest wages. In 1935, their number was one-third of that of 1928.

In 1939, industrial and office workers and members of their families accounted for more than a half (50.2 per cent) of the total population, of whom the workers and their families made up almost a third. Compared with 1913 and 1928, the share of the working class in the population as a whole increased by almost three times. Its numerical growth was due primarily to the peasants whose share in the total population dropped from 66.7 per cent in 1913 to 49.8 per cent in 1939, to the children of industrial and office workers and to a considerable extent to people who formerly belonged to the exploiting classes.

The Soviet working class grew at an especially rapid rate in the eastern areas of the country whose fast economic development, accelerated pace of industrialisation on the basis of the newly discovered rich deposits of raw materials and fuel, engendered an inflow of population from the central and southern areas. From 1926 to 1939, more than three million people moved to the Urals Area, Siberia and the Far East; the population of the Sverdlovsk, Novosibirsk, and Irkutsk regions increased by 50 per cent and that of the Khabarovsk Territory by 140 per cent. At the same time there was a decline in the population of the Kursk, Ryazan, Penza, Vinnitsa, Volyn and other regions which were not in the mainstream of the industrialisation. The fast growth of the working class stimulated the development of towns and led to important changes in the social structure of their population.

In 1926, just as prior to the Revolution, the townsfolk made up a mere 18 per cent of the country's total population. In Kazakhstan only one out of every 12 inhabitants, and in Kirghizia one out of every nine inhabitants lived in

towns. In 1939, the urban population of these republics increased 3.3 and 2.2 times respectively.

In tsarist Russia the biggest growth of the urban population, about 500,000 a year, was registered from 1897 to 1914. In the USSR, from 1927 to 1938, the annual increase was 2.4 million, or five times as fast.

The urban population and the working class owed its rapid growth to three factors: first, to the inflow of the rural population: 18.5 million peasants moved to towns. Second, to the fact that many people formerly occupied in agriculture became urban dwellers following the construction of large enterprises in many townships and villages. They totalled 5.8 million. Novokuznetsk is a case in point. In 1926, it was a village with 3,894 inhabitants, but in 1939, following the construction of the giant iron and steel works it had a population of 170,000. Third, the urban population also increased as a result of its natural growth which in those years totalled 5.3 million people.

Many large towns were built, including Magnitogorsk, Karaganda, Komsomolsk-on-Amur, Stalinogorsk (now Novomoskovsk) and Berezniki whose population consisted mainly of iron and steel workers, miners and workers of the engineering and chemical industries.

The old towns, most of them commercial and administrative centres, were rapidly developing into centres of large-scale industry and culture. Old Chelyaba (Chelyabinsk), for example, pursued a flourishing trade in wheat, butter, animal fats, meat and tea, and its economy was in the hands of the merchants who made up a considerable portion of its population. Its industry consisted of a few small factories employing a mere 2,500 workers. During the pre-war five-year plan periods Europe's biggest tractor plant and ferro-alloy, abrasive, electrode, zinc and machine-tool building factories were built in the town thus making it a seat of the heavy industry. From 1926 to 1938, its population increased 4.6 times and the number of industrial workers 11 times.

In old Russia Nizhni Novgorod was the venue of the country's biggest fairs, and although its Sormov Works was one of the country's largest at the time, industry played a secondary role in its economy. The town was reconstructed during the pre-war five-year plan periods. An automobile

factory, one of Europe's biggest, and other major enterprises were built in the town and its population increased almost threefold in 12 years.

In this period the population in the town of Prokopyevsk (coal) increased tenfold, in Dzerzhinsk (chemical industry) almost twelvefold, in Zaporozhye (power engineering and iron and steel production) and in Krivoi Rog (iron ore) almost fivefold.

From the very outset of the industrialisation the Communist Party took the course of building large industrial enterprises which was fully in keeping with the trends in modern technology. Giant iron and steel, engineering, chemical, power engineering, textile and sewing factories were built in many parts of the country. As of January 1, 1936, according to official figures, one out of every four industrial workers was employed at enterprises with from 1,001 to 3,000 workers, four out of every ten were employed at enterprises with more than 3,000 workers. In the latter category one out of every four workers was employed at enterprises with more than 5,000 workers.

The high concentration of production, the huge size of the enterprises and their modern equipment naturally determined cultural standard and the level of socio-political activity of their personnel.

By the middle of the Second Five-Year Plan period, the old enterprises were playing a very small role in the economy since their fixed production assets comprised a quarter of the industry as a whole. In the oil industry they made up less than 1.8 per cent, in the chemical and iron and steel industries 6.2-6.4 per cent. The new enterprises and wholly reconstructed enterprises played the principal role: in 1937, they yielded more than eight per cent of the gross industrial output and considerably more in some of the crucial branches (power stations, the chemical industry and iron and steel production). It was produced by workers who mastered methods of line production, discovered the secrets of high temperatures and pressures and precision machining and who became skilled operators and repairmen.

The swift growth of the working class and the urban population, not only in absolute, but also in comparative figures, the rise of new industrial centres, the radical changes

in the geographic distribution of the working class and the decisive role of the new production base—such were some of the principal and decisive results of the Second and Third Five-Year plans.

People of New Trades In the First Five-Year Plan period, iron and steel plants still employed a fairly large number of unskilled workers. In 1934, however, almost 50 per cent of the pig iron in the country was smelted in mechanised shops, compared to 25 per cent in 1930. Unskilled jobs in the iron and steel industry gradually became obsolete.

Blast furnace operators now had automatic mobile weight-bridges for wagons, casting machines and bucket cranes at their disposal, and unskilled workers were trained to operate them. Similar developments were taking place in the metallurgical industry as a whole. At the beginning of 1935, the percentage of unskilled workers in the old open-hearth shop of the Makeyevka Works was more than three times higher than in the new one where many of the manual jobs had been mechanised.

Out of the 4,160 bucketswingers, workers who extracted oil by hand with the help of special buckets, only 19 remained in Azerbaijan in 1937. But other workers, such as air-flow controllers and welders appeared. Almost a half of the total number of oil workers (formerly one out of eleven) were skilled maintenance men. The percentage of electricians increased twelve times.

A new and basically important category of highly skilled workers (6th and 7th grades) appeared at the oil fields, and the percentage of skilled workers (4th and 5th grades) increased almost 1.5-fold. In 1937, the percentage of the technical personnel rose almost five times: the new machines and technology called for daily guidance by engineers and not only oil specialists, but particularly maintenance and repair personnel. It should be added that in 1937, the Baku oil fields employed 30 per cent less workers than in 1924/25 and increased output almost fivefold. This meant that the labour productivity of each worker rose seven times.

Up to the middle of the First Five-Year Plan iron ore was mined in the Vysokogorsky mine in Nizhni Tagil in just the same way as 150 years ago. The principal role was played

by hewers wielding pickaxes and spades and by carters who loaded the ore by hand on their carts and transported it to the iron and steel works 1.5 kilometres from the mine.

The contractors, some of whom owned as many as six or eight horses, hired labourers, and managed to retain their positions even when the NEP period had long since ended. And when the miners talked about the mechanisation of production the contractors said that they were indulging in fantasy and that ore would be carted for years to come.

A telfer system was built as early as 1930 and railway tracks were laid shortly afterwards. Excavators, steam and electric locomotives, dumpcars and flat cars were now in use at the old mine which within a period of three or four years stepped out of the seventeenth century directly into the twentieth century. A single excavator replaced hundreds of hewers and ore transportation was fully mechanised.

Hewers and carters acquired new professions, and now it were the excavator and crane operators, drivers of steam and electric locomotives, fitters and electricians and other maintenance personnel who were responsible for the production process.

There were major changes in the composition of the metalworkers whose total number increased by 4.4 times from 1926 to 1939. At the same time the number of engineering industry workers of the highest grades—tool and gauge makers—rose 12.2 times and milling-machine operators 13 times.

New technology was ousting the old one based on manual labour.

There was a steady and rapid growth in the percentage of skilled and highly skilled workers in all branches of the national economy. The share of unskilled workers in the engineering industry declined from 40-50 per cent in 1928 to 20-30 per cent in 1937.

Similar changes took place in the basic chemical and other industries.

The technological revolution swept through all the branches of the economy, improving the professional composition of the working class and raising its cultural level. Remember how the great writer Maxim Gorky described a bakery in

old Russia? "We were twenty-six living machines cooped up in a dark hole of a basement where from morn till night we kneaded dough, making pretzels and cracknels which we sprinkled with our sweat; and we hated our work with a fierce hatred. Our hands and feet worked mechanically through the long hours."

After the October Revolution the working conditions in bakeries changed (the working day was reduced and the hygiene improved), but the production technology remained unaltered up to the pre-war five-year plan periods when the technological revolution wrought drastic changes also in this, formerly fragmented and primitive branch of production. Besides mechanical bakeries, 264 large mechanised bread factories were built from 1928 to 1937, and in 1940, they produced 50 per cent of the country's bread.

The Soviet fishing industry made notable progress. It developed from a domestic occupation based on heavy physical labour and courage of the fishermen into a mechanised branch of the large-scale industry.

For centuries fishermen on the coast of the Caspian and Azov seas, in the Far East and in the North put out to sea in rowing boats and small sailing ships. In the course of the pre-war five-year plan periods, a fishing fleet of steam and motor vessels was built, and in 1940, an estimated 31 per cent of the total state fish catch was conducted with the help of mechanisms. In 1940, there were 83 motor-fishing stations servicing 41 per cent of the collective fisheries. Numerous onshore facilities such as ship-building and ship-repair yards, refrigerators and canneries and also fish-factory ships were built.

Nevertheless, industrialisation did not put an end to heavy manual labour, not even in the key branches of the heavy industry. In 1940, millions of unskilled workers were still engaged in heavy manual labour. At the time there were many crucial links in the technological process which had not yet been mechanised, for in such an historically short period of time it had been impossible to introduce comprehensive mechanisation in all the key industries. It was necessary to create thousands of basically new types of mechanisms and apparatuses and conduct an enormous number of experiments. But then the country did not have enough designers

and researchers and lacked both an experimental and production base and the necessary funds.

The mechanisation of the coal-mining industry inaugurated in the rehabilitation period continued to spread at an increasing rate in the course of the three five-year plan periods. In 1940, the mechanisation of the most important processes was almost completed. Coal breaking was 96 per cent mechanised. The hewer, who formerly cut coal with a pick, learned to operate cutting machines and pneumatic hammers. Ninety per cent of all the cut coal was now transported by mechanisms to the loading drift and men who formerly hauled huge crates of coal crawling on their hands and knees learned how to assemble and repair conveyors. The need for horse haulage in the mines decreased sharply and many carters learned to drive electric haulage mine locomotives. Nonetheless, a great deal of work was still done by hand, including one of the most labour-intensive operations, the loading of coal on the conveyor. The man who performed this job shovelled a mountain of coal during his shift, but he could not keep up with the cutting machine and naturally held up the entire process. In the development face 50 per cent of the coal was also hand-mined.

The lumber industry was one of the most backward. Writing about the lumber industry at the end of the last century, Lenin said that it meant "a technique of the most elementary kind, the exploitation of natural resources by primitive methods".¹ In the first three decades of the current century it made almost no progress and all that the lumber workers had at their disposal were axes and saws and horses to haul the felled timber.

Each year, usually early in the winter when sledges could be used, a vast number of seasonal workers would set out for the forest on their own horses. In the first quarter of 1934, for example, 383,000 foot and 365,000 workers with approximately the same number of horses took part in timber felling and hauling. In an official document the Commissariat for the Lumber Industry noted that shortage of labour was one of the principal causes impeding timber haulage.

¹ V. I. Lenin, *Collected Works*, Vol. 3, p. 528.

It was extremely expensive to horse-haul timber out of forests, sometimes over distances of dozens of kilometres, and the greatest drawback was that this method was too slow to supply the country with the necessary amounts of wood. Another adverse factor was the disproportion between the volume of felled timber and the amount of timber hauled out of the forests. In 1934, approximately 4,700,000 cubic metres of timber remained in the forests and the accumulation of such vast and immobilised stocks resulted in the curtailment of timber felling.

Eventually, however, tractors, locomotives and lorries began to handle the increasing volume of haulage. Narrow- and wide-gauge railways, cableways, log roads for motor vehicles and ice roads for horses were built in the taiga. In 1940, mechanisms hauled almost a third of the total volume of the timber. The first steps were also taken to mechanise the haulage of the timber to the timber yards, but in 1940, only 5.6 per cent of the total volume of the timber were delivered by mechanised means. People of new professions—tractor drivers, crane operators, locomotive engineers, maintenance personnel and road builders appeared at the timber-felling sites.

Still the lumber industry lagged far behind other branches of production in the level of mechanisation: felling and trimming were done fully by hand, and two-thirds of the felled timber were hauled by horses.

To introduce new technology it was necessary to educate and to train the workers. Speaking at a joint Plenary Meeting of the Central Committee and the Central Control Committee of the CPSU(B), Y. E. Rudzutak noted: "...there are still many leftovers of the old capitalist system in our psychology, in our habits," and that "we should overcome this old psychology as we master the new machinery which we now have at our disposal".¹

An excavator which could perform the work of 600 diggers was brought to Bobriki (now Novomoskovsk) at the end of the Second Five-Year Plan where it in fact replaced only

¹ *Materials of the Joint Plenary Meeting of the Central Committee and the Central Control Committee of the CPSU(B), January 7-12, 1933, Russ. ed., p. 111.*

58 of them. The loading and unloading mechanisms installed in the Arkhangelsk port worked only from 3 to 16 per cent of their capacity, and similar mechanisms in the Astrakhan port fulfilled only 20 per cent of their planned quotas.¹

The mastery of new equipment was handicapped by shortcomings in technical guidance, the lack of technical know-how on the part of the workers, which led to the inexperienced use of the equipment, and also by incorrect gradation of wages. It took years of painstaking work to overcome these shortcomings, raise the political and cultural standard of the workers and bring their skill up to the level required by the new technology. This job was all the more complicated because the working class continued to absorb sections of the non-industrial population, above all people who arrived in towns from the rural areas. Progressive in itself this process called for special measures to help the newcomers speedily to find their place in industry and take root in it.

Veteran Workers and the Young Newcomers In the course of industrial development new workers came to work at almost all industrial enterprises.

This was due to the arrival of fresh replenishments. From 1933 to 1938, a section of the highly skilled workers went to work at new enterprises in response to the Party's appeal. For instance, a large number of highly skilled metallurgists arrived from the southern industrial regions and from the old plants in the Urals Area to work at the Magnitogorsk and Kuznetsk iron and steel works. Hundreds of experienced workers from the old machine-building factories in Kharkov—the electro-mechanical, locomotive-building and the Serp i Molot Works—went to work at the Kharkov Tractor Plant. They were replaced by newcomers primarily from the rural areas. But cadres of highly skilled workers remained at the reconstructed enterprises where they handed down the glorious traditions of the working class to the young workers.

The Akhtyrski, Ushakov, Smetski, Lobanov and Byelousov workers' dynasties won fame at the Kolomna Locomotive Works while the Second Five-Year Plan was still in progress. Prior to the Great Patriotic War (1941-45), there

¹ *Ibid.*, p. 112.

were hundreds of veteran workers who remembered the time when the works was owned by Prince Meshchersky and its director was a man who resorted to the most brutal forms of exploitation.

The Komsomol members Potapov, Sirotkin, Kharlamov, Busygin and thousands of other young men and women, the new generation of the working class who took over the great traditions of their fathers and grandfathers, toiled prodigiously side by side with the veterans who took part in strike battles, the armed insurrection of 1905 and the October Socialist Revolution of 1917.

The renowned smith Ivan Bobin first came to the Kirov Works in 1898. For 29 years he worked as an apprentice and heater before he was made a smith. He was 56 then.

Valentin Avdeyev, a milling-machine operator at the Voroshilov Plant, was born two years after the October Revolution. He got a job at the plant after completing a factory apprenticeship school where he joined the Komsomol. Simultaneously he finished a seven-year general education school. When the modern "Milwaukee" milling machine was installed in his shop, he was placed in charge of it and proved that the training he had received stood him in good stead. The young man designed and assembled several highly efficient appliances for the machine, rationally organised his labour and began to fulfil three and even four daily work quotas.

At the old industrial enterprises both the average age of the workers was greater and their length of service longer than at the new ones. But there was not a single branch of industry or enterprise where young people did not play an important role. The considerable decline in the average age of the working class was a notable feature in the period from 1933 to 1940. Young people made up a particularly large portion of the workers employed in the new branches of production; for example, three out of every four workers in the automobile and tractor industry were not older than 29, and only one out of every 11 workers was over 40.

Alexander Busygin was 22 when he left his native collective farm in the Uren District, Gorky Region, in the autumn of 1930. He walked to the district centre and from there made his way to Gorky on a freight train. At first he got

a carpenter's job at the construction site of the automobile factory. Eighteen months later, when the first section of the factory was commissioned, he asked to be transferred to the forge and press shop. There he worked as an oiler and simultaneously learned to operate the forging machine. Completing his training he became a forger and shortly afterwards he was entrusted with one of the most powerful forging machines in Europe. In the autumn of 1935, he became famous throughout the country as a daring innovator and initiator of the movement for higher labour productivity in the engineering industry.

The life of Busygin's friends at the Gorky Automobile Plant, including the smith Stepan Faustov, the stamper Nikolai Maslennikov, the machine operators Anna Generalova and Anastasia Stryukova and thousands of other workers followed a similar pattern.

In November 1935, Alexander Busygin invited all the members of his team to his birthday party. It was a meeting of friends and they spoke about many things including the reasons which induced them to become industrial workers.

A. Busygin: "My two brothers and I married and moved to different huts. I brought along my things and sat down to a meal. There was only one plate, part of my wife's dowry on the table. And the whole family ate from it. I still have it. Here it is, all chipped. My wife also brought along a sewing machine. I sold it, borrowed some money from my father-in-law and bought a nag. But I also needed a cart. So I hired myself out to the village smith. Throughout the autumn and winter I worked from six in the morning to six in the evening. Saving 42 rubles I bought a cart with metal hoops on its wheels. I came to hate poverty and need. Even now, I cry in my sleep whenever I see my village life in my dreams. And so I decided to get a job at the automobile works."

Heater Novoseltsev: "I am 33. I first started working at the age of 13. Father and I used to make bast mats. We would start at six in the morning and end at midnight which left us very little time for sleep. We sowed rye, but often not enough to last until the next harvest. And then they would order me to go out and beg. In April 1921, my parents died from typhoid fever leaving me, a youngster of 18,

with a 15-year-old sister and two brothers, one aged four and the other still an infant, on my hands. We survived thanks to Soviet power."

Fitter Tyurin: "I am 32. Father died when I was two and a half. I hate to recall my childhood days. At the age of ten I slung a pauper's bag over my shoulder. It is hard to imagine what I felt when I had to beg for a crust of bread."

Smith's assistant Suetin: "As soon as I heard that an automobile factory was being built in Nizhni Novgorod, I decided to go there. I arrived in a torn jacket with twenty kopecks in my pocket."

The bulk of the peasants who replenished the ranks of the working class came from the poorest sections of the rural population.

A census conducted at the Gorky Automobile Factory in 1934 showed that out of 24,000 workers more than a half were not older than 24, just over one-fifth had already turned 30, and only one out of ten had a service record of more than 15 years. Workers with a service record going back to the pre-revolutionary times comprised a still smaller percentage. Two out of three workers had come from the villages.

This age pattern of the workers at the Gorky Automobile Factory was typical of all the new industrial enterprises. At the new iron and steel and chemical works and at giant engineering factories the decisive role was played by the young workers who took part in building these enterprises and then acquired various industrial trades.

By the beginning of the Second Five-Year Plan period, 50 per cent of the workers at the Kuznetsk Iron and Steel Works, the Moscow Automobile Factory and the Moscow 1st Ball-Bearing Plant were under 23 years of age. At the Bobriki Chemical Mill only a third of the workers were over 23.

It took a young man who first arrived at the construction site three or four years to become a skilled worker. It was a hard period in his life for after completing his shift at the construction site and often having to participate in crash jobs, he would attend vocational courses, or a vocational school where he would be trained in his chosen profession.

Then, having completed his studies he would have to acquire the practical know-how in the course of the production process.

In the capitalist countries it took an unskilled worker even in the most favourable conditions from 12 to 15 years to become a steel smelter, furnaceman, rolling-mill operator and so forth. In the USSR the training period lasted a few years at the cost of considerable overhead expenses. Suffice it to say that each machine tool in the mechanical shop of the Uralmash Works broke down at least twice within the first eight months of 1933.

Financial and material losses were very high. But considering that industrialisation had to be conducted at an accelerated rate dictated by the vital needs of the people themselves, there was no other way of training highly skilled personnel.

One of the newly created industries in the country was the rare-metals industry—the extraction of ore and its enrichment and processing. Miners in the remotest parts of the country mastered the new equipment with great difficulty. In November 1935, Logoda, a leader of a team of shock-workers at Jida mine said: "We received a fine excavator. But we had very little training and didn't know how to use it with the maximum efficiency."

The new workers had to be trained to handle machines and it was necessary to help the veterans to get rid of their obsolete work habits.

The old, experienced blast furnace workers who had been transferred to the Magnitogorsk Works from the factories in the south of the country and the Urals Area refused to use first-class tap guns although they tremendously facilitated their work.

The head of the Magnitogorsk project and the first director of the Magnitogorsk Iron and Steel Works Y. S. Gugel related:

"Workers from the south of the country and the Urals Area who were sent to Magnitogorsk were critical of modern mechanisms. Until recently Urals workers called any automatic device at their factories a 'blabber' since it showed the quality of their work. . . . The task was to erase the old work habits and make the workers realise that it was impossible

to continue working without using mechanisms and apparatuses."

Technical training was combined with extensive political and educational activity. Day after day the Party and trade union organisations explained the great advantages of the new machines which eased labour and made it incomparably more effective, interesting and better paid. It was necessary to train each worker, whatever his job, to use not only his hands but also his brains, to display initiative and thus become a conscious builder of a new life. By January 1, 1936, a total of 993,000 workers at heavy and light industry enterprises passed state technical examinations. The following year 5.5 million workers were undergoing training at various courses and schools.

Not only the newcomers, but also the veteran workers studied. Afanasy Tarasov, an experienced smelter, who first came to the factory which today is called Krasny Oktyabr in 1914, began to study seriously only in the thirties when the enterprise was set the serious task of mastering the production of high-grade metals. At the time he was a welder. He did not fulfil his daily quota and his work was of low quality. So, together with other workers he joined a technical study circle organised by engineer Silkin who grounded them in the rudiments of theory, explained the role of oxygen in combustion, the changes in the colour of the flame depending on the amount of oxygen fed into the welding torch, and so forth.

Practical studies were conducted directly at the furnace. Completing his course at the circle Tarasov began to work faster, more confidently and without any flaws. He was appointed head of a team and expertly fulfilled his more responsible duties. With time he felt it necessary to enhance his knowledge and he began to study again. Shortly afterwards he was made the chief welder of his shift and serviced five furnaces.

The members of his team also studied. Former unskilled workers Surkov, Sheremetyev and Poddubnov became welders. Other members also acquired industrial trades.

At all the new industrial enterprises the most responsible jobs were assigned to teams of young workers who fully mastered the new equipment. In 1934, the Government de-

corated the best teams for their dedicated labour and success in mastering the new machines. The movement of the innovators of production acquired a genuinely mass character.

The forecasts of the German journalist A. Just that the technological revolution in Russia would not be accomplished did not materialise. He travelled across Siberia in the early thirties and seeing the state of industry there, wrote:

"Countless new and expensive imported machines are being deliberately wrecked, because the Russian, for whom the sawmill is mysterious deity, wants to prove to himself that he can throw a brick instead of wood into its all-consuming maw. It appears that in the past ten years Stalin has been unable to make his people technically-minded. . . . Generations do not grow so fast. A whole millennium separates the wooden plough from the tractor."

Like many other people who entertain the same views, Just erred. By the middle of the Second Five-Year Plan period, the Soviet workers not only learned to operate wood-working enterprises, but also the incomparably more complex metallurgical, chemical and mining equipment.

This was achieved at the cost of tremendous effort. The difficulties of mastering new equipment were attended by the laborious process of remoulding the psychology of yesterday's peasant, of the petty proprietor, who was unaccustomed to industrial labour and to strict production discipline.

The peasants who swelled the ranks of the working class included former domestic craftsmen, small owners who dreamed of returning to their "own" workshop.

The 1929 trade union census showed that they comprised 2.4 per cent of the workers of the electro-technical industries in Moscow Region and Leningrad and 1.5 per cent of the workers of the Moscow Region cotton industry. Former merchants, kulaks and members of other, now extinct capitalist classes, made up a still smaller share of those who sought employment in industry. Gradually most of them developed a new outlook under the influence of their workers' collectives and the new way of life in the country. Nevertheless, the class enemy had not been wiped out completely. In April 1935, the country was shocked by the news of the murder of two men in Nizhni Tagil. One was Dmitry Kedun, a militiaman. The other was Grigory Bykov, a foremost miner

at the Vysokogorsky mine. In newspaper articles he fearlessly exposed the dirty machinations of the kulak-contractors who were plundering the wealth of the people.

Bykov's funeral developed into a formidable manifestation of the people's hatred for those who had vilely shot him in the back and for those who stood behind the killers.

The shots in Nizhni Tagil were a warning to those who were becoming complacent and dizzy with success. It took a great deal of effort to crush the class enemy once and for all, to make each worker regard his socialist enterprise as his home, and to turn yesterday's small-owner into an advanced, class-conscious industrial worker.

Apart from putting in a tremendous amount of work to train the workers in the latest production methods and in the use of machines, the enterprises devoted considerable attention to raising their general educational and cultural level, and primarily to teach the illiterate and the semi-literate. In those years many workers could neither read nor write and a still greater number were semi-literate who could hardly write their own name.

In 1934, less than four per cent of the workers at the Gorky Automobile Factory were illiterate, but one out of every four was semi-literate. These were newcomers, mostly from the rural districts. At the same time there were 2,000 workers (10.8 per cent) who had an incomplete, and 1,000 (5.4 per cent) a complete secondary education. The appearance in industry of a fairly large stratum (over 16 per cent) of industrial workers with an incomplete or complete secondary education already at the beginning of the Second Five-Year Plan period mirrored the basically new and promising processes taking place in the working class and which gained wide scope in the coming years.

Makar Mazai, a steelworker whose magnificent production success won him widespread fame in the pre-war years wrote in his autobiography:

"When I came to the works (Ilyich Works in Zhdanov—*Ed.*) in 1930, I could hardly read or write. I had attended a village school for a winter and a half and little remained in my head.... I could hardly sign my name, and though I was active in Komsomol work, I read neither newspapers nor books.... I began to study and a year later enrolled at

a professional technical course. In 1933/34, I studied at the correspondence department for steelworkers at the Dnepropetrovsk Mining Institute." From 1938 to 1940, Mazai was a student of the Industrial Academy.

Both the newcomers and the veteran workers in all branches of production successfully mastered advanced technology.

A considerable portion of the young workers moved into the ranks of the highly skilled personnel even in the most complex branches of production. In 1934, young workers comprised 25 per cent of the highly skilled personnel (7th and 8th grades) in the metallurgical industry. Young people made up 50 per cent of the engineering industry workers in the 5th grade category, 40 per cent in the 6th grade, 30 per cent in the 7th grade and 20 per cent in the 8th grade. To a considerable extent this was due to the efforts of the professional workers who taught the newcomers, passed on their experience and impressed upon them that they, too, were largely responsible for upholding the honour of the workers' collective. The greater the number of the old workers at the enterprise, the faster its personnel surmounted all difficulties and mastered the new machines. It is indicative that the mastery of new equipment proceeded at a faster rate at the reconstructed enterprises.

In 1937, however, this process was still far from being completed. In some industries with complex technology it proceeded very slowly due to the low qualification of the workers. For example, in some shops of the Uralmash Works the skill of the workers in 1937 was at least a grade below the required qualification level.

In many cases the gap was still greater, which, of course, affected labour productivity and the quality of the output, and the enterprise continued to train the workers.

In October 1940, the Presidium of the Supreme Soviet of the USSR introduced new forms of industrial training for young people in towns and those coming from the collective farms. Vocational and railway schools with a two-year curriculum were set up for the purpose of preparing skilled workers for industry and transport. Industrial workers were trained at six-month factory apprenticeship schools. Their annual enrollment ranged from 800,000 to a million people

who were wholly supported by the state during their study period.

This step inaugurated a fresh chapter in the formation of working class cadres and its influence made itself felt in the ensuing years.

More and more workers swelled the ranks of the new Soviet intelligentsia and occupied leading posts in the socialist industry as the working class steadily heightened its cultural and technological level and increased its political activity.

The Communist Party worked hard to bring up and educate the new people's intelligentsia—the flesh and blood of the working class. During the pre-war five-year plan periods (from 1928 to 1940), the number of specialists with a secondary or higher education employed in the economy increased more than five times: in January 1941, there were 714,000 engineers, technicians and economists with a secondary or higher education in the USSR as against 117,000 in 1928. The new Soviet intelligentsia fully lived up to expectations when as early as in the initial stage of the Second Five-Year Plan period a large number of its representatives were made heads of enterprises, trusts and head offices and then heads of industrial commissariats.

I. F. Tevosyan, a prominent Soviet statesman, started out as secretary of an underground regional committee of the Party in Azerbaijan during the period of foreign intervention there. He was the youngest delegate to the Tenth Party Congress and took part in putting down the Kronstadt mutiny. When the country entered the period of peaceful construction he began to study. He graduated from the Mining Academy and became assistant foreman at the Elektrostal Works, which now bears his name. Later he worked his way up to the post of People's Commissar and then Minister of the USSR Ferrous Metallurgy. As head of the Spetsstal Association, a post he occupied in the first five-year plan periods, he organised a new and important branch of production—high-grade metallurgy.

P. I. Korobov was a gasman at the Makeyevka Works. He enrolled at a technical institute and completing his studies worked at a number of large plants as head of blast furnace shops. With time he was promoted to the post of director of the Magnitogorsk Works. Under his guidance the giant en-

terprise attained the rated capacity and began to produce the country's cheapest metal. In 1939, P. I. Korobov was made First Deputy Commissar of Ferrous Metallurgy.

A. D. Bruskin, upon graduating from the technological institute was a fitter, foreman, designer, assistant shop superintendent and then chief engineer at the construction site of the Kharkov Tractor Plant. When the project was completed he became its technical director and then promoted to the post of director. Later he was First Deputy People's Commissar for the Heavy Engineering Industry and then People's Commissar for the Engineering Industry of the USSR.

The road covered by these three men was typical of that of many leading executives of the socialist industry including S. S. Dyakonov in the engineering industry, Y. L. Brodov and O. P. Osipov-Shmidt in the chemical industry and K. K. Kartashev in the coal industry, in fact, of the entire technical intelligentsia of the working class.

Y. T. Abakumov, K. I. Rumyantsev, I. A. Likhachev, M. S. Mikhailov, L. S. Vladimirov and very many other former workers became outstanding organisers of production. They were not diploma'd engineers, but acquired their profound knowledge of technology in the course of their work in industry. Subsequently many of them completed the Industrial Academy.

Though they employed different methods of administration and had unlike characters, all these top industrial executives of the new type had much in common: their kinship with the working class and indefatigable determination to advance with all possible speed. They became thoroughly familiar with the production processes not only from books, but also by observing them on the spot. They often visited workers' homes, attended Party and trade union meetings in workers' teams and shops and worked in close contact with engineers and technicians. The traditions created by the Communists who stood at the head of the enterprises were largely instrumental in consolidating the workers' collectives and promoting a general upsurge in the creative activity of the masses.

A distinguishing feature of the Second and Third Five-Year Plan periods was the immense work which was conduct-

ed to train and retrain workers and to help yesterday's peasants get rid of their petty-bourgeois psychology.

Emergence of National Cadres

From manual labour to modern machinery, from a primitive peasant's hut to a flowering socialist town, from illiteracy to the management of involved industrial production, such has been the road covered by the majority of the working class. But its progress in the formerly backward national areas was especially spectacular. In an extraordinary short historical period it spanned the giant gap between the feudal, even the tribal, system and socialism.

Tusun Kuzemayev, a Karaganda miner, turned 27 when the October Socialist Revolution took place in the country. In his childhood he worked for wealthy landowners and at the age of 16, he managed to get a job at one of the small mines operated by a British company. He hewed and loaded coal on what were called sledges and crawling on all fours hauled them out of the drift. The mineworkers never had a day off or a holiday and there was neither a school nor a hospital at the mine.

The October Socialist Revolution drastically changed life in Kazakhstan. In the course of the Second Five-Year Plan period the Party and the working class turned Karaganda into the country's third biggest coal basin.

Having learned to read and write at the age of thirty Tusun continued his studies at courses and a technical school. In 1935, he became Kazakhstan's first Stakhanovite and in 1938, he was put in charge of a mine. In recognition of his selfless work the Government awarded him three Orders of Lenin, the Order of the Red Banner and the Gold Star of Hero of Socialist Labour.

In many respects Kuzemayev's life was similar to those of the workers making up the national contingents of the Soviet working class. They were formed in the formerly backward areas of the country where modern industry appeared only in the period of socialist industrialisation. Thousands upon thousands of former tillers, stockbreeders and nomads came to work at the new enterprises and railways. By the beginning of the forties the former colonial outskirts of tsarist Russia had numerous well-knit working-class contingents

in which the leading role was played by industrial and building workers.

In 11 years, from 1929 to 1940, the Soviet working class increased 189 per cent.¹ At the same time the working class in the Tajik SSR increased 672 per cent, in the Kirghiz SSR—293 per cent, in Kazakhstan—249 per cent and in Uzbekistan—235 per cent.

Within a short space of time there were thousands of workers employed at the Karaganda mines, at the giant Balkhash Copper Works, the Chimkent Lead Plant, industrial enterprises in Ust-Kamenogorsk, the Aktyubinsk Chemical Plant, the Emba oil fields, the Chirchik Electro-Chemical Works and at the agricultural machinery factory and textile mill in Tashkent.

Prior to the Revolution factory-owners took advantage of the political and cultural backwardness of the oppressed nationalities to exploit them to the utmost. In Baku, for example, Azerbaijan, Iranian, Lezghin, Tatar and Armenian workers toiled 362 days a year. They had only three days off to observe religious holidays.

From the outset of the economic upbuilding in the country the Soviet state made every effort to draw the indigenous peoples into industrial production. This was not an easy task: there were the religious prejudices to overcome, the people were unaccustomed to industrial labour and were afraid to change their mode of life. On top of that there were other obstacles, namely, the illiteracy of a huge number of people and the hostile activity of wealthy landowners and their supporters.

In the Karaganda Basin, for example, a tremendous amount of political and educational work was carried out in the thirties to persuade the Kazakh miners, particularly their wives, to move out of their traditional felt tents and to live in houses and to send their children to nurseries and kindergartens.

By the middle of the Second Five-Year Plan period workers of indigenous nationalities still accounted for a small

¹ In 1940, a formidable contingent (725,000) of the proletariat of the Baltic republics and Moldavian SSR joined the ranks of Soviet workers.

percentage of industrial and building workers. At times they preferred to work at small enterprises rather than in large-scale industry. From 1932 to 1937, the share of the workers of indigenous nationalities employed in large-scale industry in the Uzbek Republic ranged from 16 to 17 per cent, and over 40 per cent in the industry as a whole.

The situation began to change rapidly following the creation of the system of state labour reserves. At first, for a certain period of time it was necessary to mobilise pupils to study at factory apprenticeship and vocational schools. With the establishment of labour reserves schools it became possible to increase the number of workers of local nationalities many times over.

Workers from the Donets Basin and the central areas of the country rendered fraternal assistance in the training of national personnel. Hundreds of women workers for the Tashkent Cotton Mill were trained at factories in Moscow, Leningrad, Serpukhov and Ivanovo. A hundred and eighteen workers from this mill, mostly Uzbek men and women went through a two-year course of study at the Institute of Labour of the Commissariat for the Light Industry of the USSR. Other workers were trained at the Khalturin Factory in Leningrad and the Prolétarka Factory in Kalinin. Moscow and Ivanovo regions sent 424 skilled women workers and 80 engineers and technicians to the textile mill in Tashkent. At the same time the mill began to operate a training centre which prepared 800 women workers, two-thirds of whom were Uzbeks. Besides training the newcomers specialists from the old industrial regions reared them in the finest traditions of the Russian working class.

In those days there were many international teams in Uzbekistan made up of skilled Russian working women and studying Uzbek women, and individual patronage was widespread in the republic. Both forms of training personnel acquired major political significance, since they helped eradicate the vestiges of national strife, local nationalism and chauvinism.

In November 1936, Chairman of the Council of People's Commissars of the Kazakh SSR U. D. Isayev told the Eighth Extraordinary Congress of Soviets of the USSR that life had completely overturned all the great-power chauvinistic

and nationalistic "theories" that it was allegedly not in the nature of the "pastoral Kazakh people" to plough the land, work in the mines and drive locomotives.

At the time 66 per cent of the Karaganda miners were Kazakhs. Within a decade the number of Kazakh skilled fitters and engine drivers working in the basin increased five times. The Kazakhs also made up the bulk of the skilled workers of the Karaganda Coal Basin, the Chimkent Lead Factory, the Emba oil fields and Ridder's factories.

The names of many highly skilled Kazakh workers, including the oil driller Isagambet Kurmanliyev, miner Aubakir Sadykov and water-jacket furnace attendant Shardobek Krikbayev became widely known in the country.

Even the smallest nationalities, which prior to the Revolution had no written language, built up their own national personnel.

Meme Kereme, a Mordovian woman from the Erzia tribe, spent her childhood in the village. In those years small-scale individual peasant economy was still flourishing and the kulaks exploited the poor peasants to the utmost.

"I worked for the kulaks, for the rich people," she related. "I nursed their children for a meal. On other days I would reap or beat hemp for 50 kopecks a day with blistered hands and bleeding fingers. . . ."

A new life began for Meme at the tractor factory on the banks of the Volga. For seven months she did odd jobs and attended a factory apprenticeship school where she studied geometry, technology and acquired a good knowledge of machines and became an expert fitter.

Meme fulfilled and overfulfilled her quotas and the administration provided her with a room with electric lighting and steam heating. Few houses had such amenities then. Immediately she got her mother, two brothers and a sister to live with her. One brother became a welder and the other entered a factory apprenticeship school. Thus, within a short time three members of a family which previously had never even seen a factory, became skilled machine builders.

The family lived in cramped conditions, but Meme did not worry because she knew that housing construction was gaining momentum and that it would not be long before they would have a bigger place to live in. She enrolled at a work-

ers' high school and took part in public activity. She became a member of a group of assistance to the cultural drive and a controller at the mechanised canteen.

Contingents of national specialists were also formed in those years. Students from Kazakhstan, for example, studied at the Dnepropetrovsk Mining Institute and in 1937, the first group of diploma'd Kazakh mining engineers returned to Karaganda. Agybayev was appointed chief engineer at Pit No. 48, Saginov was given the post of chief of the mining inspection and Sergazin was appointed assistant director of a trust. It is impossible to name all of them and the posts they held. Students from Central Asia studied in Moscow and Leningrad. The steady growth in the number of engineers, technicians, teachers and doctors showed that all the national republics and areas were surmounting their backwardness, and that all the peoples of the USSR, including the most backward in economic and cultural development had acquired genuine equality.

**Improvement of Living
Conditions as a Means
of Abolishing Labour
Turnover**

The changing conditions engendered new problems and difficulties, the difficulties of growth. In the early thirties the Commissariat for Labour instructed the administrations of construction sites and industrial enterprises to send their representatives to the remotest rural areas to search for labour reserves. Millions of people began to move to the towns. But in order to tie the workers to their enterprises it was necessary to surmount the old obstacle—the shortage of housing.

Despite the fact that housing construction was being conducted on hitherto unprecedented scale, the situation remained extremely grave. From 1929 to 1932, a total of 38.7 million square metres of housing were built and tenanted. In this period 8.6 million peasants got job at industrial enterprises. That meant that each newcomer received only 4.5 square metres of living space, and many of them arrived with their families. Moreover, a large number of the old workers were also in need of housing.

Food shortage was another factor which made many people disinclined to tie themselves up permanently with industry. As a result, at the beginning of the Second Five-Year

Plan period, too, the functioning of key industries depended to a considerable extent on the field work in the countryside, on the seasonal inflow and outflow of the workers.

In the spring of 1933, the workers who arrived at the Donets Basin mines the previous autumn began to resign. At the time, the outflow of seasonal workers was not too great in view of the difficulties which the countryside was still experiencing following the 1932 crop failure. But in August, as soon as it became clear that an excellent harvest was expected, the Donets Basin lost 11,000 workers. Emergency measures were taken to prevent a fall in the coal output: annual holidays were temporarily cancelled and mining school students were sent to work in the mines.

Labour turnover began to decline considerably only in the period of the Second Five-Year Plan as more and more people came to industrial centres no longer in search of temporary work in order to earn money with which to purchase a cow, a horse or a plough.

Millions of factory workers who were connected with agriculture, and seasonal workers quit their farms for good. A part of the seasonal workers got permanent jobs at machine-and-tractor stations and state farms; others, and they formed the overwhelming majority, became professional industrial workers. They sought jobs at enterprises where they could become skilled workers and thus earn a good wage and get a place to live not only for themselves but also for their families. At first a seasonal worker was content with a room in a barrack. As soon as he got one he would bring his family to live with him severing all ties with the village. The share of the workers who maintained connections with the rural districts started to decrease perceptibly.

From 1933 to 1941, eight per cent more housing was built and tenanted each year than in the First Five-Year Plan period. The rationing of food and consumer goods which was introduced in 1928 was abolished in 1935. Labour productivity rose and so did the real wages. The income of the workers' families grew as two and even three of their members were drawn into production. The state funds for improving cultural and welfare facilities increased. From 1930 to 1935, the aggregate income per each member of the family of a worker employed in large-scale industry rose almost three-

fold and continued to grow in the subsequent years. In 1940, the number of dependants per worker fell to 1.2, compared with 2.05 in 1930 and 1.59 in 1935.

The situation further improved as wages in various branches of production were brought in conformity with the work done. The pre-revolutionary proportions were preserved in the main throughout the period preceding the pre-war five-year plans. The lowest wages were paid in industries where seasonal workers constituted the majority of the personnel although they did not conform to the heavy labour they had to perform and the significance of these branches for the economy as a whole.

In 1928, out of 17 registered industries, the wages in the coal-mining industry occupied fourteenth place and in the iron-ore mining industry twelfth place. A miner's wage was more than 44 per cent lower than that of a machine builder or a worker of the printing industry and 28 per cent lower than that of a worker of the footwear industry.

The Communist Party followed the line of raising wages in industries where labour was particularly arduous and which were important for the entire national economy. As a result, in 1935, the wage level in the coal-mining industry moved up to fourth place and in the iron-ore mining industry to sixth place. At the same time the wage level in the printing industry dropped from second to third and in the footwear industry from fourth to tenth place.

These changes likewise served to turn the seasonal workers most of whom were employed in the mining, metallurgical and other labour-intensive industries into permanent workers, and millions of workers gradually moved their families from the rural districts to workers' townships.

It took a long time for the seasonal worker to get rid of his old psychology. But the transition to a permanent industrial job, which meant that he had to get rid of his farm in the countryside, depend on the wages as the sole source of income and become a member of a production collective, wrought the necessary change in his outlook. As a result, one of the main causes of the unevenness in the work of the industry and the sharp decline in production during field work was eliminated.

As the factory workers severed their ties with agriculture and millions of seasonal workers turned into permanent workers they were able to improve their skill, raise their cultural level and become more active in public and political life. The former seasonal workers, many of whom at first felt themselves strangers at industrial enterprises and thought only of their farms in the villages, gradually developed into front-rank workers, active builders of socialism. This was one of the most important socio-political results of the industrialisation.

The growth of industry and towns and the rise in the cultural and technical level and in the material welfare of the workers created a situation in which the workers changed their attitude to their enterprises. Up to 1931, while there was still unemployment in the country, the working people strove to settle down wherever they could get a job. But when unemployment ended they received the opportunity to select jobs which were either better paid, more interesting or which enabled them to improve their living conditions.

Thus, the excessive fluctuation of labour caused by seasonal inflows and outflows gradually gave way to another type of labour turnover—the shifting of workers from one industry to another. It had an adverse impact on production. Henry Ford considered that the resignation of even one unskilled worker caused him a loss of \$300-400. Excessive labour turnover impeded the training of personnel, had a negative impact on the work of production collectives and disorganised intra-factory planning.

To a certain extent the intra-industry labour turnover was a natural outcome of the growth and the promotion of workers' cadres: a builder became an industrial worker in the shop which he had helped to build, an unskilled worker went through a course of training and became a lathe operator, and so forth. Alongside this positive development, however, an unorganised mass of people flowed from town to town, factory to factory and shop to shop. They were mainly unskilled or semi-skilled workers whose wages were lower and housing conditions were worse than those of the skilled workers.

In some measure the labour turnover was also caused by the flaws in the rate setting system and the difference in the

wages paid to workers of identical skills even at one and the same factory or mine.

The Communist Party orientated the Party organisations and economic executives on eliminating these shortcomings and doing everything to improve living conditions. After visiting Magnitogorsk, People's Commissar for the Heavy Industry G. K. Orjonikidze prohibited the construction of barracks and ordered that only modern houses should be built. Touring the industrial centres of the Urals Area he began his inspection of individual enterprises by conducting a thorough examination of hostels and workers' homes. At the All-Union Conference of Heavy Industry Workers in September 1934, he spoke not only of the major problems facing the industry but also of the measures which would improve the workers' housing and stressed that it was the duty of the factory directors to take care of the workers and their children because "apart from us no one else will look after our workers' children".

After that the factory administration invariably took care that the hostels were well heated in winter, that they had enough water for drinking and other purposes and that they were kept clean and cosy.

On the initiative of the Gorlovka Party organisation a drive to improve public services and amenities in townships and cities was launched in the Donets Basin. After working hours thousands of miners, machine builders and workers of the metallurgical and chemical industries planted trees and shrubs, built clubs, stadiums and tramway lines.

Almost all industrial centres followed suit. At a conference in January 1934, representatives of 15 biggest towns adopted a minimum programme for improving cultural and welfare facilities. Among other measures it included the installation of electric lighting and the construction of a wire broadcasting line and the asphaltting of the main streets. Today, when kerosine lamps are a thing of the past and all workers have radio and TV sets in their homes, this programme might bring a smile to the reader's lips. But almost forty years ago it was a bold step, all the more so because many small towns and workers' townships also decided to do the same.

In the Second Five-Year Plan period 3.3 times more funds were channeled into the USSR municipal economy than in the First Five-Year Plan period and ten times as much as was allocated for the same purpose in the first post-revolutionary decade. From 1933 to 1937, water mains were laid in 74 towns and a sewerage system was built in 44. Tramway lines were laid in 23 towns.

Let us take the living conditions of the Kuznetsk workers. In 1931, two thousand workers employed at the Kuznetsk project spent the bitter winter in padded tents. There was neither water supply nor sewerage systems in the town and water was brought in barrels. Houses and barracks had no kitchens and hot food was available only in canteens where there were always long queues.

The first houses with a central heating system and other amenities were built in 1932. In 1933, a town theatre and a hospital were built, and in four months seven kilometres of tramway lines were laid. Work was started on a park of culture and rest. Schools, kindergartens and other children's institutions were built at a rapid rate. In 1934, all dugouts were demolished.

By the middle of the Second Five-Year Plan period workers' living conditions markedly improved. And although there was still an acute shortage of housing, nurseries, kindergartens, schools and hospitals, it was obvious that definite headway was made in raising the standard of living.

Beginning of the Stakhanov Movement

The record set by the Donets Basin miner Alexei Stakhanov on August 31, 1935 ushered in a new phase in the development of socialist emulation. It was quite in the order of things that the innovator should have fulfilled 14 quotas in a single shift and that thousands of other workers should have followed his example. The Stakhanov movement was the result of the basic changes that had taken place in the composition of the working class. The way for this movement was paved by preceding developments. A year earlier the builders of Verkhnyaya Salda in the Urals Area called the People's Commissar for the Heavy Industry G. K. Orjonikidze that they were regularly fulfilling six, seven and even more daily quotas.

In November 1934, the shock-workers of the Menzhinsky Aircraft Factory wrote an open letter to the press calling upon all heavy industry workers to turn out only excellent and high-quality output. They proposed that the term shock-worker should be applied not only to workers who fulfilled and overfulfilled their quotas but also turned out high-quality products. A shock-worker, they stressed, had to keep his work place tidy, that he should keep on studying to improve his skill and to share his knowledge to the other workers.

These proposals gave rise to the drive for excellent quality output. It rapidly involved hundreds of thousands of workers and played a tremendous role in improving the quality of production. This movement first appeared in the aircraft industry for the simple reason that it was the most dynamic and rapidly developing branch of production. Since planes and aircraft engines have to be constantly improved, a rally of aircraft industry shock-workers decided that their enterprises should attain such a degree of technological and production flexibility which would enable them speedily to develop new types of aircraft and organise their serial production.

Launching the drive for excellent quality output the foremost workers came forward with another splendid initiative. They requested permission that the units and parts which they produced should not be inspected by the checking department. Such permission was granted but only to workers who were conscious of the full measure of the responsibility. To grant a worker the right to stamp his initials on the items he manufactured the factory administration had to have the approval of a workers' meeting. Sometimes a worker's skill was overestimated, but experience showed that once a worker had been granted this right he usually did his best to live up to it.

In 1935, the socialist emulation entered a stage when it became possible to revise the existing quotas, and the initiative of Alexei Stakhanov reflected the requirement of the times.

Striving to make the most efficient use of the machinery, the Stakhanovites avoided stereotype solutions and searched for methods best suited to the character of production. The miners widely resorted to division of labour within each team. Alexander Busygin, a smith at the Gorky Automobile Factory

reorganised his team's work. Each member was trained to perform a specific job which enabled the team to work more rhythmically. Ivan Gudov, a milling machine operator at the Orjonikidze Works in Moscow, devised high-speed methods of cutting metal. Yevdokia and Maria Vinogradov, weavers at the Negin Textile Mill in Vichuga, Ivanovo Region, began to operate 100 looms instead of 16. Litvinenko, a worker at the Kalinin Sugar Refinery increased by three times the number of vacuum apparatuses in his charge.

The Stakhanov movement involved all branches of production and all workers.

The Communist Party supported the workers' initiative. In November 1935, more than 3,000 workers were invited to Moscow for the All-Union Conference of Stakhanovites. The workers' forum which sat for four days in the Kremlin was addressed by Alexei Stakhanov, Alexander Busygin, Yevdokia and Maria Vinogradov and many other leaders of the socialist competition, directors of enterprises, Party leaders and statesmen, including G. K. Orjonikidze, P. P. Postyshev, J. V. Stalin and others.

In December 1935, a Plenary Meeting of the CPSU(B) Central Committee discussed the initial results of the Stakhanov movement and drafted a programme for its further development. It contained concrete recommendations and took into account the specific features of each branch of the national economy. The technical training of the workers was to be conducted on a greater scale. In particular, it was proposed that the People's Commissariat for the Heavy Industry was to provide technical training facilities to all its workers within three or four years. In the food industry all permanent workers and skilled seasonal workers were to take their examinations in the required minimum of technical knowledge.

People's commissariats of the industries concerned were recommended to convene conferences for the purpose of discussing the question of revising the quotas for the installed working equipment, production quotas and the capacities of the enterprises.

As these decisions were carried into effect the Stakhanov movement gained in scope. By August 1, 1936, it embraced a quarter of the workers employed in certain industries, and

by the beginning of 1939, this figure rose to 40-47 per cent.

Unfortunately, serious mistakes were committed in this important matter. At times the urge for records tended to decrease the concern for raising the productivity of labour at the enterprise as a whole. In their efforts to help the Stakhanovites some industrial executives paid no attention to the other workers. The records set by individual innovators were not matched in all the production processes and naturally bred disproportions. In general, however, the Stakhanov movement enormously influenced the development of industry. In the First Five-Year Plan period labour productivity rose 41 per cent, in the second 82 per cent and in the third by another 33 per cent.

The Stakhanov movement gave rise to far-reaching processes within the working class. A special survey revealed that up to 1929 the maximum wage was earned by workers from 45 to 49 years of age. It could not have been otherwise for they were highly qualified specialists, as a rule. From 1931 to 1938, younger workers from 30 to 34 years of age moved into forefront. This, too, was a natural development. Young people (this age group at the beginning of the Second Five-Year Plan period consisted of workers of 23-27 years of age) who came to work at factories were better educated and found technical training less difficult. Moreover, they were not burdened by obsolete views and conservatism in production practices.

The survey showed that the Stakhanov movement was largely stimulated by the system of wages: among the time-rate workers only 8.4 per cent were Stakhanovites, among the piece-rate workers 39.2 per cent and among the workers who received progressive piece-work wages the figure was over 50 per cent.

The Stakhanovites raised the level of their profession to a new height, overturned the concept of "hopeless" occupations and showed in practice what great prospects were open to any worker at a Soviet enterprise.

The Stakhanov movement helped tremendously to raise the qualification of the working class as a whole, heighten its production and public activity and raise its welfare.

Labour became a matter of honour. A workers' family was proud of the shock-worker cards of its members and

the place they held in the socialist emulation. In December 1938, the Presidium of the USSR Supreme Soviet instituted the highest award for successes in economic and cultural construction—the title of Hero of Socialist Labour and also the medals "For Valorous Labour" and "For Distinguished Labour".

A New Contingent As it transformed the country, the working class also underwent changes. Some of its sections disappeared, while others, engendered by the new economy, appeared and developed. And as the professional composition of the working class became more complex its social homogeneity increased. Such was the impact of the technical reconstruction of industry and social progress.

Up to the thirties, some sections of the working class were still exploited by the bourgeoisie of the NEP period and the kulaks. The bourgeois sector lasted the longest in the rural districts and there was a time when the farm labourers made up the bulk of the agricultural proletariat. As a social group they existed until the kulaks were eliminated as a class at the end of the First Five-Year Plan period. The presence of this group reflected the social heterogeneity of the working class and the multisectoral nature of the Soviet economy of the period.

In the course of socialist transformations, however, the group of farm labourers gradually disappeared giving way to the rising new contingent of the agricultural working class—workers of state farms and machine-and-tractor stations. This meant that in the course of socialist reconstruction of the countryside the farm labourers in effect moved in the same direction as did the industrial proletariat in the period from 1917 to 1920 when it took power into its hands and nationalised the industry.

The Revolution and Soviet power opened all roads to the former farm labourers, many of whom rose to prominent positions in the country among them the renowned Divisional Commander V. I. Chapayev, Marshal of the Soviet Union R. Y. Malinovsky, President of the Presidium of the Supreme Soviet of the Uzbek SSR Y. A. Akhunbabayev, President of the Byelorussian Academy of Sciences V. F. Kuprevich and Chairman of the Zvezda Vostoka Collective Farm and thrice

Hero of Socialist Labour H. Tursunkulov. The former farm labourers became the masters of their own destiny. In 1929, alone, 18,600 former farm labourers received responsible posts in economic, trade union and Party organisations and thus moved from the working class into another social category. Similar development took place among the industrial workers, the peasants and other sections of the population. Social distinctions under socialism became less and less pronounced.

Needless to say, however, that not all farm labourers ceased to belong to the working class after they had stopped working for the kulaks. Many of them went to work in industry, construction and transport where there was an increasing demand for labour power.

The industrialisation of the country and the socialist changes in the countryside gradually did away with the agrarian overpopulation, banished unemployment among the former farm labourers and improved the situation in the villages. At the same time the migration of a considerable portion of the farm labourers to the towns facilitated the formation of workers' cadres for the socialist industry. The fact of the matter was that from the end of the twenties to the early thirties when the process of the elimination of the kulaks as a class was at its height, a large number of kulaks fled from the villages and sought employment in industry, particularly at the construction sites. This created the danger of alien elements infiltrating the workers' collectives. The shift of a large number of the former farm labourers to industrial production, however, helped stem this danger and became an important factor guaranteeing the purity of the ranks of the working class.

Naturally, the former farm labourers did not immediately adjust themselves to large-scale industrial production, and many of them at first regarded their work in towns as a seasonal job, a temporary source of income. Among them was Alexei Stakhanov, a 22-year-old farm labourer from the village Lugovaya in Orel Gubernia, who in 1927 got a job as an assistant wagoner at the Tsentralnaya-Irmino Pit in the Donets Basin. "I came in bast shoes and a bag slung over my shoulder," Stakhanov later disclosed. "My plan was a simple one: I intended to save about 400 rubles during the summer

and buy a horse and harness. As regards land, Soviet power gave us all the land we needed. . . . I was scared to death of the mine and could not forget what my grandfather told me: 'A mine is hard labour. You'll lose your health for nothing and perish'." Many other farm labourers who came to work in towns thought the same.

In May 1930, the Union of Land and Forest Workers to which the farm labourers belonged signed an agreement with the Union of Coal Industry Workers to enlist 45,000 people from villages in the Russian Federation and the Ukraine for work in the mines of the Donets Basin, Moscow Region and the Far East. By November that year, about 51,000 people, six thousand more than planned, arrived in the coal basins. The conditions which were offered to the village poor were favourable and they enlisted eagerly.

Farm labourers sought employment in the oil, forest, building and other industries. In 1929 and 1930, they made up 33 per cent of the ore miners, 31 per cent of the coal miners, over 18 per cent of woodcutters, oil workers and building workers, 17 per cent of the workers of the basic chemical enterprises.

The socialist industry attracted people and helped them to attain higher cultural, educational and technical standards. "I received good wages. I, a village lad, was entrusted with a huge open-hearth furnace, and I acquired the technical know-how," wrote steelmaker M. Mazai, a former Kuban farm labourer who in 1930 got a job at an iron and steel works in Mariupol and six years later initiated the all-Union competition of steelmakers.

Particularly striking changes took place in the life of women farm labourers who with time became industrial shock-workers. "When I left my village I knew how to milk cows, cook and look after children. But that was not enough. . . . I wanted to work at a factory, to be a skilled worker and take an active part in the great industrialisation movement," recalled P. N. Pichugina. So she went to work at the construction of the Moscow Ball-Bearing Plant. She started out as an unskilled worker and then when the plant was completed became a charwoman at the assembly shop. Studying in the evenings she acquired a profession and subsequently became assembly shop foreman. In recognition of

her excellent work the Government awarded her the Order of the Red Banner of Labour. In 1934, the plant's workers elected her deputy of the Moscow Soviet and in 1937, she was elected deputy to the Supreme Soviet of the USSR.

Thanks to socialism masses of benighted farm labourers in the national outskirts who were subjected to national and class oppression under tsarism, rose to conscious and active participation in the life of the country.

In 1931, three former farm labourers, three brothers Sarsin, Sapar and Nugman Abiltayev arrived from Kazakhstan at the construction site of the Stalingrad Tractor Plant. They started out as diggers and studied at the same time. And they continued to study when the plant was put in operation. Acquiring the profession of foundrymen they joined the Stakhanov movement. Their successes were typical of many other farm labourers. "We are not the only ones who are happy. Look how people of other nationalities live. We have Tatars, Mordovians and Kalmyks at our enterprise. Some are workers, some engineers, some technicians. All have found their place in life. We dearly love our country... and we shall defend our happiness against any enemy." Industrialisation also spread to Kazakhstan. Mentioning this fact in 1935 at a conference of Stakhanovites in the Moscow Kremlin, a leader of the Turkestan-Siberian Railway Temirbek Sarbayev, once a farm labourer, said: "Under capitalism we were not permitted to enter the Kremlin. Now we are surrounded with care and attention... We are living a new life today."

The farm labourers who remained in the villages and took part in establishing socialist agricultural enterprises—collective farms, machine-and-tractor stations and state farms—also embarked on a new life. It was a difficult job. At the end of the twenties they and the poor and middle peasants fought a decisive battle against the rural bourgeoisie, the last exploiting class in the country.

A characteristic fact was that the farm labourers resorted to strikes, a typical proletarian method of struggle. Strikes took place in Orenburg District, in the Middle and Lower Volga areas, in the Don Area, in Siberia, in Moscow Gubernia and other parts of the RSFSR, in the Odessa, Kherson and Kiev areas in the Ukraine, in the Crimea, Byelorussia, the Transcaucasus and Central Asia. In 1929, according to trade

union figures the farm labourers hired by the kulaks organised approximately 50 strikes in the villages.

There was a definite growth in the class-consciousness and the level of organisation of the agricultural proletariat. The strikers did not confine themselves to putting forward partial economic demands, but displayed their firm determination to do away with kulak exploitation by establishing state and collective farms.

"Comrades, we are not destined to be farm labourers for ever," appealed the participants in a strike which broke out in the village of Verkhne-Tuzlovskaya in the Don District. "To overcome the kulaks and to build a better life for yourselves, you must unite in collective farms and build up a socialist agriculture."

The proletarian solidarity of the farm labourers was a distinguishing feature of the strikes. For example, a strike which broke out at the vegetable farm owned by the capitalist Ivanov in the vicinity of Odessa was supported for a week by the labourers employed at three other kulak farms and shortly afterwards spread to all the nearby farms where vegetables were cultivated on irrigated fields.

Industrial workers, Soviet public organisations and state bodies did much to help the striking farm labourers. In the course of the two-week strike in the village of Kurenevka near Kiev, 2,500 workers of the Kiev Tram Depot and the Frunze Tannery donated a part of their wages to the strikers. Effective assistance was also furnished by their trade union whose membership increased during the strike. The Soviet state rendered most decisive assistance. A group of diehard kulaks was brought to trial on charges of violating labour legislation. Meeting the wishes of the farm labourers the Ukrainian State Farm Trust set up a vegetable state farm in Kurenevka with the view to providing jobs for the agricultural workers.

By the beginning of the Second Five-Year Plan over a million former farm labourers joined collective farms to swell the ranks of the collective farm peasantry. About 900,000 went to work at state farms and machine-and-tractor stations, approximately 100,000 became industrial workers, over 200,000 after studying in towns became office workers, and so forth. About 100,000 remained in the rural areas work-

ing for private individuals. The greater part of them were nurses and watchmen. In most parts of the country kulak farms no longer employed hired labour. By the end of 1933, there were about 30,000 kulak farms in agricultural regions of secondary importance, compared with 1,100,000 prior to the collectivisation. The capitalist sector in the countryside and with it both its social poles—the kulaks and the hired labourers—ceased to exist at the outset of the Second Five-Year Plan. The process of the transition of hired labourers from the private to the socialist sector was completed in the main.

"It was as though my life had been divided into two parts," recalled Hero of Socialist Labour P. F. Suslova, a milkmaid at the Karavayevo State Farm in Kostroma Region. "The first thirty years were years of humiliating existence of a homeless hired labourer. The other thirty years were years of a free life, of joyous labour for myself and for the state." From the end of the twenties to the beginning of the thirties, the former hired labourers were the principal source of permanent labour power for the state farms and accounted for 37 to 44 per cent of their workers.

A new contingent of the working class, the workers of the state sector in agriculture, was rapidly developing in the rural areas. In 1940, there were about 1,500,000 permanent workers at state farms, auxiliary agricultural establishments and machine-and-tractor stations. Their nucleus consisted of maintenance personnel and tractor and other farm-machinery operators. Not all of them were included in this figure, for while the tractor drivers at state farms were workers, their counterparts at the machine-and-tractor stations were collective farmers. But due to the nature of their work they could, in a way, be likened to industrial workers.

Thus, from the very beginning machine operators at collective farms were a special social group within the class of collective farmers and changed their social position on more than one occasion in the course of their development. In 1935, combine operators were included into the personnel of the machine-and-tractor stations in addition to the maintenance workers, the administrative staff and other people who were there from the outset. In this way the combine operators became workers, while the tractor drivers remained

collective farmers right up to the early fifties when they, too, became part of the staff of the machine-and-tractor stations. In 1958, following the reorganisation of these stations the majority of farm machinery operators on their staff once again became collective farmers.

There were other similar changes in the course of the social development in the Soviet countryside: peasants who went to work at state farms became workers. In 1930, from 13 to 21.5 per cent of permanent state farm workers were peasants, who formerly almost wholly depended on their individual farms for sustenance. As the years went by more and more peasants came to work at the state farms. And in the fifties a fairly large number of backward collective farms was reorganised into state farms with the result that the farmers became workers.

The fact that these changes involved whole social strata showed that under socialism the movement of masses of people from one toiling class to another is a faster and a less painful process than under capitalism. In a socialist society, where there is no private ownership of the means of production the difference in the relationship to the means of production which is characteristic of a class society loses its former significance even if it does not disappear completely. Therefore, it is easier to surmount the distinctions between classes.

In 1940, farm machinery operators made up from seven to eight per cent of the collective farmers and about 20 per cent of the state farm workers. But, as Lenin pointed out, the role of social groups in society depended not so much on their numerical size, but on their place in production. Personifying the industrial trend in the development of agricultural production, the farm-machinery operators always comprised the leading contingent of the rural population. They had attained a much higher cultural and technical level and conducted much more intensive public activity than the bulk of the agricultural workers. In 1933, about two per cent of the workers at machine-and-tractor stations were illiterate, while even in 1939, more than 23 per cent of the entire rural population could neither read nor write.

In 1935, from 15 to 17 per cent of the tractor drivers and combine operators at machine-and-tractor stations were either

Party or Komsomol members. At the same time the percentage of Party and Komsomol members among the field-team leaders was 5.5 per cent and even lower among the majority of the collective farmers.

As should have been expected, many farm-machinery operators proved to be gifted innovators who studied and rapidly introduced new industrial methods in agricultural production.

More and more of them became expert in handling Soviet-made machines. In 1936, only 8,000 tractor drivers on machines made at the Chelyabinsk and Stalingrad Tractor plants harvested over 1,000 hectares each, but the following year this target was attained by almost twice as many tractor drivers. Combine operators did not lag behind. In 1936, K. A. Borin of the Shteingard Machine-and-Tractor Station in Krasnodar Territory operating an S-1 combine took in the harvest from an area of 2,040 hectares. It was a unique achievement: 208 railway cars were required to transport the grain which he had harvested.

Though remarkable in many respects at the same time Borin's life was typical of that of many other people.

A former hired labourer, fitter and then a team leader at a collective farm, K. A. Borin completed a six months' school for combine operators in 1934. His high production results brought him fame and respect. But he strove to attain still better results. Continuing to study the combine he even introduced some essential modifications in its design. In 1940, he entered the Timiryazev Agricultural Academy. The war interrupted his studies. Returning from the frontlines he resumed his work and his studies and today Hero of Socialist Labour, Candidate of Agricultural Sciences K. A. Borin lectures at the academy where he had once been a student.

The life of the renowned Soviet tractorist P. N. Angelina, twice Hero of Socialist Labour, was also typical of the times. Her appeal to women to learn how to operate a tractor developed into a mass movement that played a very important role during the war.

P. N. Angelina related an episode which she witnessed at a meeting at the Timiryazev Academy. Taking the floor one of the students, a middle-aged peasant said: "All of us, comrades, came here from the wooden plough..." Saying this

he stopped, surprised that he used the term "wooden plough" which was so commonplace just a few years ago. The hall laughed and so did the speaker. In this connection P. N. Angelina remarked: "All of us were peasants, that's true, but not of the old kind. We came to the academy from the tractor, the combine and the farm laboratory. In our country the distance between these things and a desk at a higher educational institution is not so great."

Indeed, within the lifetime of a single generation the country advanced from the wooden plough to the harvester combine, from mass illiteracy to mass influx of students into academies, from the grim lot of the hired labourers to the firm realisation that the working man was the master of his own destiny.

Masters of Their Country The Second Five-Year Plan was a period of rapid changes in the social relations, in the economy and culture.

In 1935, the share of socialist forms in various branches of the Soviet economy ranged from 100 per cent (retail trade turnover) to 94 per cent (agriculture). In other words, the socialist system had scored a complete victory in all branches of the national economy.

Having in the main created the material and technical basis of socialism, the USSR developed into a mighty industrial and collective farm power whose economy was absolutely independent of the capitalist states.

The class structure of Soviet society also changed. The socialist revolution abolished all the exploiter classes in the country leaving only the working class, the peasantry and the intelligentsia.

Changes took place in the general makeup of the classes and the role they played in society. Prior to the Revolution, the working class was deprived of the instruments and means of production. The ruling exploiter classes also did everything in their power to prevent the proletariat from participating in the administration of the state. In the Third State Duma more than fifty per cent of the deputies were noblemen, ten per cent were clergymen, ten per cent were merchants, while the workers and handicraftsmen made up a mere four per cent.¹ In effect the working class could elect

¹ V. I. Lenin, *Collected Works*, Russ. ed., Vol. 16, p. 533.

only six deputies from industrial areas where special election precincts were set up for the workers.

By the beginning of the Second Five-Year Plan period, there were 179,000 former workers among the industrial executives and specialists. There was not a single link in the system of state administration beginning from the apparatus of the USSR Central Executive Committee and the Council of People's Commissars where representatives of the working class did not play a leading role. The situation was the same even in People's Commissariats for Foreign Affairs, Foreign Trade and Finance whose staffs were specially trained for the job. These facts showed that the working class played a decisive role in state and economic administration. The Soviet power elevated the working man. It made him a builder of his own life, master of his land and accorded him the possibility of exercising his right to take part in the management of the state.

Great changes took place in the lives of the formerly oppressed and economically and culturally backward peoples. They not only attained legal, but factual equality, and the causes breeding chauvinistic and nationalistic ideology were eliminated. All republics had developed their cadres of industrial workers and collective farmers. In these conditions the Seventh All-Union Congress of Soviets held in February 1935 deemed it essential to further democratise the electoral system, to replace the not fully equal elections by equal elections, multistage by direct, and open ballot by secret ballot. The Congress pointed out that the Constitution should reflect the new balance of the class forces. A special commission drew a draft of the new Constitution, which was discussed by the whole country. The new Constitution was adopted in December 1936 at the Extraordinary Eighth Congress of Soviets following a report by J. V. Stalin.

Its adoption ushered in a new stage in the history of Soviet society connected with the development of the dictatorship of the proletariat into a state of the whole people.

The Constitution ensured the right of all Soviet people to work and rest, free education and medical treatment, maintenance in old age and in the case of sickness and disability. Under the Soviet democratic system all citizens have equal rights irrespective of their nationality or race and the

inviolability of their legitimate personal interests is protected by law. The Constitution also laid down the duties of Soviet citizens including the observance of Soviet laws, the maintenance of labour discipline, the safeguarding of public property and the defence of the socialist Motherland.

Workers made up 42 per cent of the deputies elected to the first Supreme Soviet of the USSR in December 1937. This composition of the highest organ of state power conclusively proved that the working class was playing the leading and guiding role in the life of the country.

The life road of the workers who were elected to the first Supreme Soviet of the USSR was typical of millions of other members of the working class of the period.

For ten years Pavel Kurakin was a hired labourer on a kulak farm. In 1911, at the age of 17, he got a job at the Konstantinovskiy Metallurgical Works, but shortly afterwards returned to his village. After the October Revolution he volunteered for service in the Red Army and in 1926, once again got a job at the Konstantinovskiy Works. Persistently mastering the production process he became assistant steel-maker and then a steelmaker. He could barely sign his name when he came to the works. At production and technical courses he not only mastered the machines, but also avidly studied the rudiments of literature, mathematics, geography and history.

The life of Isant Akhmetov followed approximately the same pattern. He was born into the family of a poor peasant. In 1900, at the age of eight, he hired himself out as a herds-boy to a kulak. For eight years he was a farm labourer and after that spent seven years felling trees. When the First World War broke out he was drafted into the army and was discharged after being heavily wounded at the frontlines. In 1924, at the age of 32, Akhmetov came to work at the Baimak Copper Plant. Starting out as an unskilled worker he subsequently was promoted to furnace attendant and by the end of the Second Five-Year Plan period was a shop foreman. He began to study at 35 and made good progress. At the same time he was active in social work. In 1936, the plant's workers delegated him to the Eighth Congress of Soviets.

Kurakin and Akhmetov represented the elder generation of Soviet people. At the time of the October Revolution they

were almost 25. Fyodor Lashtoba had just turned ten when the socialist revolution triumphed in the country. Still, he had a hard life in the beginning. Three winters in a row he attended a primary school, hiring himself out for all sorts of jobs in summer. In 1919, when he had turned 12, his parents made him a herdsboy at a kulak farm where he spent three difficult, tear-filled years. In 1926, he decided to settle down in the Krivoi Rog iron-ore basin. There his skill as a driller earned him far-flung fame and in 1937, he became a member of the Soviet parliament.

The destinies of these people mirrored the destiny of the whole country with its tremendous successes and difficulties.

The Soviet Union could have scored still greater achievements if not for the Stalin personality cult which assumed particularly ugly proportions towards the end of the Second Five-Year Plan period. At the Plenary Meeting of the CPSU(B) Central Committee held in February-March 1937 Stalin advanced the erroneous tenet that the class struggle would gain in intensity as the country moved towards socialism. "In practice this incorrect theoretic formula served as a pretext for the grossest violations of socialist legality and mass repressions."¹ The personality cult was an alien element in socialist society and clashed with the fundamental trends and the results of its development. "Despite the evil the Stalin personality cult caused the Party and the people, it could not and did not alter the nature of our social system."²

The Second Five-Year Economic Development Plan was fulfilled ahead of schedule in April 1937—in four years and three months. The USSR firmly established itself in second place in the world for volume of industrial output. Labour productivity and the public welfare rose steadily from year to year. Socialist collectivisation in the countryside was completed.

That was how the working class translated the principles of socialism into life. Guided by its vanguard, the Communist Party, it directed the country's development further towards communism.

¹ CPSU in Resolutions... , Russ. ed., Part IV, p. 229.

² Ibid., p. 231.

Before the Storm Each year a large number of workers' delegations from different countries visited the Soviet Union. Their members were Communists, socialists and people without party affiliations. They appraised the new world that opened before their eyes and listened to the Soviet people who told them about the difficulties and mistakes which they encountered and committed as they built the world's first society without exploiters or exploited.

Addressing delegations of foreign workers attending the 1938 May Day celebrations in the USSR, M. I. Kalinin frankly said: "Ours is not a land flowing with milk and honey. We have none of these things. It is a state where all people work, and it began at the bottom of the ladder, from Robinson Crusoe's hut, figuratively speaking. You are welcome to see things for yourself. . . . Perhaps we have committed many mistakes. That, I think, is possible. Perhaps, sometimes we do the wrong things. That, too, is possible. But I wish to tell you. . . that a proletarian world is being created. . . . The Soviet Union—a Mecca for the proletariat."

The world working class looked upon the USSR as its shock-brigade. That inspired the working people of the land of Soviets and strengthened their determination to build a new life.

In the meantime clouds were gathering over Europe and Asia. Following the victory of the Popular Front in the February 1936 elections in Spain, her reactionary forces launched a military mutiny organised with the help of German and Italian fascists.

Performing its internationalist duty the Soviet Union came to the assistance of the Spanish people. Millions of Soviet people proclaimed their solidarity with the Spanish working class. The workers of the Trekhgornaya Manufaktura Factory in Moscow initiated a fund-raising campaign to assist Republican Spain and dozens of ships with food, medicines and consumer goods were sent to Spain. Five hundred and fifty-seven Soviet volunteers fought for the freedom of the Spanish people.

The Soviet working class manifested its internationalist solidarity in the most diverse forms. Thousands of Soviet men and women, workers and intellectuals, warmly welcomed

the evacuated Spanish children in the ports of Leningrad and Odessa and at Moscow Airport. Boys and girls from Madrid, Toledo and Valencia quickly felt themselves fully at home in the Soviet Union where they were brought up, educated and became skilled workers and specialists.

In 1937, the Japanese imperialists launched a war of aggrandisement in China. The Soviet Union, which itself was short of foreign currency reserves granted China three loans totalling \$250 million in 1938 and 1939; on the most easy terms it supplied China with weapons, fuel and motor vehicles.

In 1939, Japanese forces attempted to seize the territory of the Mongolian People's Republic. In heavy battles on the Khalkhin-Gol River the Red Army together with the army of the Mongolian People's Republic inflicted a shattering blow on the Japanese invaders, routing them just as they were routed a year earlier at Lake Hasan.

In September 1939, the Second World War began, and the Communist Party intensified its efforts to strengthen the country's defences. The defence industry developed rapidly as more and more factories and shops switched to the production of armaments. From 1938 to 1940, the average annual increment in the volume of industrial production was 13 per cent, while in the munitions industry it was thrice as high. Especial attention was focussed on strengthening the fuel and raw materials basis and developing industries in the eastern areas.

The working class did its utmost to augment the country's defensive capacity. Soviet women came to the assistance of their husbands and brothers and many of them went to work at factories mastering occupations which had once been the realm of men only. Tatyana Ippolitova of the Magnitogorsk Works became the first woman in the world to become a steel-maker and her example was followed by Marianna Zikeyeva. In view of the mounting threat of a Nazi attack, the Soviet Government introduced a range of serious measures designed to strengthen labour discipline, including regulations under which the size of sick-leave grants depended on how long a worker was employed at a given enterprise and the additions to pensions were likewise based on a worker's un-

broken service record... In special cases the people's commissariats were given the right to transfer skilled workers, technicians and engineers to other enterprises, including those situated in remote economic areas.

The international situation warranted the introduction of extraordinary and stringent measures. On June 26, 1940, the Presidium of the USSR Supreme Soviet issued a decree prohibiting workers and employees to quit their jobs at will or to transfer from one enterprise or office to another. The five-day working week was extended by a day and the seven-hour working day was lengthened by an hour.

The Red Army was replenished by people with a good knowledge of modern equipment in industry, transport and machine-and-tractor stations and could, therefore, quickly learn to handle sophisticated weapons.

The entire mode of life in the USSR prepared them for socialist labour and the defence of the country. Millions of young men and women wore the badge "Ready for Labour and Defence". After work thousands of them attended various circles and training sessions at stadiums. Most popular with the young people were the airclubs where many outstanding pilots received their initial training, among them Alexander Pokryshkin, a fitter at a Siberian factory, Nikolai Gastello, a furnace attendant at a locomotive depot, and Victor Talalikhin, a worker at a Moscow meat works. The world's first parachute units were formed in the USSR in the thirties. The Society for Promoting the Country's Defences and Assisting the Development of Aircraft and Chemical Industries trained hundreds of young instructors and tens of thousands of parachutists. The foreign military delegations attending Red Army manoeuvres in 1934 and 1936 were amazed when thousands of parachutes of different colours dotted the sky, a sight none of them had ever seen before.

Skiing also became a favourite sport with the young people. Over 6,000,000 participated in the first ever ski cross which took place in 1941 on the initiative of the Central Committee of the Komsomol.

Other sports, including sharpshooting, mountaineering, football and chess, developed rapidly. Komsomol and trade union organisations did much to promote a mass sports

movement and to draw millions of young, and not only young, workers into it.

Both during the years of peaceful construction and in the grim years of the Second World War, the Soviet working class, all Soviet people in practice demonstrated their political and technical maturity, their ability to solve the most difficult problems, to pave the way into the future and to defend it from the aggressors.

THE WORKING CLASS IN THE GREAT PATRIOTIC WAR (1941-1945)

War. This word entered the life of the Soviet Union on June 22, 1941, drawing a sharp line between the past and the new day, the first of the 1,418 days of the most bitter battles history has ever known.

As in the days of peace the working class was the heart and soul of the fighting people, displaying its determination and will on the very first day of the war.

Together with the vast country the working class rose to a life-and-death struggle against fascism.

On the Forward Line
of Defence

The first explosion shocked Y. M. Fomin out of his sleep. A direct hit wrecked regimental headquarters where his office and temporary home was situated. Reaching for his gun holster and army tunic he raced down the stairs leading to a bomb shelter already packed with half-dressed people. Like the others he was not sure what was happening and quietly asked whether saboteurs had set the ammunition dumps on fire. He simply could not utter the fatal word "war". He was an ordinary 32-year-old man and like the majority of the people in the shelter had never been under fire. He had a family, he liked his work and he had a future.

But he was also a Communist and before he entered military service he was a worker and a propagandist. Thanks to his Party training and proletarian background he quickly grasped the situation and mustered self-control. Within a few minutes, his tunic buttoned up to his chin and shoulders

thrown back, Regimental Commissar Fomin was confidently issuing orders. That was how the heroic defence of the central citadel of the Brest Fortress began at daybreak on June 22, 1941. A former Vitebsk worker, Commissar Y. M. Fomin became its commander and shared the fate of the immortal garrison.

For over a month the unvanquished Brest Fortress, which had remained in the rear of the advancing enemy, repulsed the invaders. The first months of the war were bitter ones as the Red Army retreated abandoning towns and villages to the enemy.

But the Soviet people, guided by the Communist Party, the Party of the working class, had no thought of surrender. On June 22, martial law was proclaimed in a number of regions and general mobilisation into the Armed Forces was launched. On June 29, the Council of People's Commissars and the Party Central Committee instructed all Party and Government organisations in the frontline areas to mobilise all forces and means to repulse the enemy. On June 30, the State Defence Committee, headed by Chairman of the Council of People's Commissars, General Secretary of the Party Central Committee J. V. Stalin, was set up by a joint decision of the Presidium of the Supreme Soviet, the Council of People's Commissars and the Central Committee of the CPSU(B).

An important measure of the initial period of the war was the formation of people's volunteer divisions with the industrial workers as their core. The idea of raising people's volunteer units was advanced by the people themselves and was immediately translated into reality. The first workers' and communist battalions appeared within a few hours after the outbreak of the war, and together with the regular army units defended their towns. That was what happened in Liepaja which was encircled on the second day of the war and where the Red Armymen, Baltic sailors, workers' detachments, Communists and Komsomol members held the enemy at bay for ten days. That was what had happened in other towns which became frontline towns overnight.

By the end of the month, people's volunteer divisions were being raised in the rear of the vulnerable directions. They were formed at the request submitted to the Party organisa-

tions by the working people themselves. During the first five days of the war 20,000 people in Moscow who were exempt from military service demanded to be accepted as volunteers and dispatched to the frontline. In Leningrad the formation of people's volunteer units began on June 30 when the City Party Committee summoned the people to join the Leningrad People's Volunteer Army. It was formed within six weeks and consisted of ten divisions and a number of separate regiments and battalions.

In the night of July 1, the Party Central Committee and the Soviet Government met in the Kremlin with the heads of Party and Government organisations of Moscow. It was decided to form people's volunteer divisions in the capital. They were to be raised by Party committees at industrial enterprises as of July 2, and within four days 11 full-strength divisions were formed.

In the Donets Basin the people's volunteer corps numbered 220,000 and the divisions commanded by K. I. Provalov, A. I. Petrakovsky and I. D. Zinovyev won undying glory.

Volunteer divisions were raised in Kiev, Dneprodzerzhinsk, Stalingrad and Ivanovo and other industrial centres with great revolutionary traditions.

A vast number of people volunteered, but not all were accepted. Out of the 187,000 applications handed in Moscow and Moscow Region in four days in July only 120,000 were signed up. Preference was given to younger and healthier people. The veteran workers of the Baltic Plant, former Red Guardsmen and partisans admonished the young workers with the following words: "A people's volunteer unit is being formed at our enterprise. We appeal to you, young patriots, to live up to the glorious fighting traditions of the Baltic Plant's workers, to join this unit and be prepared at any minute to fight arms in hand for the honour and independence of our country."

The veterans not only guided the young people but were determined to take part in the fighting themselves. N. I. Rybakov, a veteran worker at the Kalibr Plant, a Party member since 1905 told a factory meeting:

"I've participated in three revolutions—the 1905, the February 1917 and the Great October Socialist revolutions—and I have fought in three wars—the Russo-Japanese, the First

World War and the Civil War. In honour of our great leader Vladimir Ilyich Lenin I have named my son Vilen (formed out of V. I. Lenin's initials—*Ed.*). Now that the Party has proclaimed the formation of a People's Volunteer Corps, my 17-year-old son and I have decided to sign up. I, Nikita Rybakov, and my son Vilen Rybakov will hammer the Hitlerites as long as we have the strength. Long live Lenin's great cause."

The Kalibr Plant raised a 650-strong people's volunteer regiment. The *Pravda* wrote at the time: "You had only to be at the factories in these historic days to see for yourself the might of the working class which is rising arms in hand to defend the righteous cause, to see that the working class is united to a man and to see its confidence in the victorious outcome of the war imposed by Hitler's Germany on our people."

The workers did in fact set examples of fortitude and patriotism. They constituted the majority in a number of people's volunteer units: 61 per cent in the Vyborg District of Leningrad, 65 per cent in Moscow, and there were some divisions where the percentage of the workers was even higher. The infantry and artillery regiments of the 1st Division of the Leningrad People's Volunteers were wholly raised at the Kirov Works and the 2nd Infantry Regiment at the Zhdanov Works. With the exception of the Commander and Commissar, both regular Red Army officers, the commanding personnel of the division consisted of workers. The division went into action under the banner of the Kirov Works.

Clearly the formation of the people's volunteer corps was the natural outcome of the mass movement of the working people who besieged Party committees and the offices of the military commissariats demanding to be sent to the frontlines as volunteers. It was also the reaction of the people to the extremely difficult situation of the first months of the war, when the army in the field was still small and when the mobilisation and the training of conscripts and the transfer of regular troops to the frontlines were still in progress. In these circumstances the formation of people's volunteer divisions not by military commissariats, but by the public itself made it possible considerably to increase the scope of mobilisation. The people's volunteer corps were formed of people who could

handle weapons but who were not registered for military service. As a rule they were between 18 and 55 though in some cases younger and older people were signed up.

In the initial period of the war the people's volunteers, "civilian soldiers", as they were called, performed many heroic deeds.

On July 3, German panzers, their commanders standing in the open hatches as though on parade, lunged at Mogilev in what was a sort of a psychological attack. Three or four days earlier almost all the townsfolk came out on the bank of the Dnieper and ringed the town with a double row of anti-tank ditches and wire obstacles. The workers of the motor-repair, tube-casting and brick works were among the first to enlist in the people's volunteer units. Expecting only slight resistance the Germans were not prepared for the hurricane fire at the approaches to the town. They kept attacking for five consecutive days. The left bank was strewn with blazing panzers and heaps of dead German soldiers covered the bridge across the Dnieper and the town's ramparts—the key to Mogilev's defences. On July 14, the town was encircled but continued its resistance.

On the twenty-third day when it was no longer possible to maintain defence the defenders began to break through the encirclement in groups leaving behind covering detachments which fought to the last man.

Workers' battalions stood their ground to the last, shoulder to shoulder with regular Red Army units in Riga, Daugavpils, Bobruisk, Orsha, Tallinn, Smolensk, Yelnya and other towns. In the fierce battles of the period the Soviet defenders overturned the German Command's plan of a lightning breakthrough to Moscow.

In the frontline zone the concept "forward positions" could not be clearly defined. The January Uprising Factory in Odessa was in the rear. Yet, early in August shells began to fall on its territory. Nevertheless, people worked for days without rest turning out mortars, armoured trains and other weapons and equipment, and even found time and strength to build defensive installations.

A memorial plaque attached to the wall of one of the shops bears the inscription: "During the defence of Odessa the main

tank repair base of the Odessa Defensive Area was situated here."

The writer Konstantin Simonov who visited Odessa in those days wrote that "working time here was measured not by the number of hours or the number of sleepless nights but solely by how long it took to repair a tank. 'I'll get some sleep as soon as we finish the tank'".

The workers defended their city arms in hand just as heroically. Komsomol member Nina Onilova, a worker at the Odessa knitted-wear factory learned to handle a machine gun and killed hundreds of the enemy. After recuperating from a heavy wound Nina saw action at the walls of Sevastopol. Shortly before she was killed Nina made the following entry in her diary: "Never think of death, then it will be easy to fight. Yet, you must know exactly for what you are prepared to die. If only for the sake of performing an act of heroism and the glory that will come with it, then this is very bad. The greatest deed is one that is performed in the name of the people and the country."

By the middle of November, the Germans captured the Crimea, where only Sevastopol remained in Soviet hands. The industrial enterprises which had not been evacuated were moved to underground premises and adits. The population lived in shelters. Under incessant fire from naval guns, artillery and heavy air strikes, men and women workers, kept the defenders supplied with weapons, ammunition and clothes and repaired the damaged equipment right on the defence perimeter. Komsomol member Nastya Chaus, a worker at the Morskoi Factory lost an arm in an air raid. Checking out of the hospital she categorically refused to be evacuated.

She demanded to be given a job and this was done. Operating a punching press she exceeded her daily quota by 140-150 per cent and was decorated with the military Order of the Red Star.

The workers of Odessa, Sevastopol, Leningrad, Moscow and other frontline towns firmly followed the instruction of the State Defence Committee: "Continue production to the last minute. Disassembly will begin only when ordered by the representative of the State Defence Committee or the respective People's Commissariat."

The heroic defence of the cities standing in the way of the German advance made it possible to complete the mobilisation of the Red Army and deploy it in the necessary directions, to evacuate industrial enterprises and other material values into the country's rear. Contrary to nazi calculations the war acquired a drawn-out character and their plans of a *blitzkrieg* against the USSR collapsed.

Seeing the failure of the original intention of making a lightning thrust at Moscow in the early stage of the war, the nazi command devised Operation Typhoon whose very name betrayed their intention of achieving a lightning breakthrough to the Soviet capital.

The Germans launched the offensive on September 30-October 2, 1941. On October 19, a stage of siege was proclaimed in Moscow and the surrounding regions. In response to the call of the Moscow Party organisation all citizens rose to the defence of the capital.

"No matter how long the mad fascist hordes stay at the approaches to Moscow, they will never set foot in it. Fascism will wind its grave at the approaches to Moscow. All for the front," declared the metallurgists of the Serp i Molot Works. And their words became the oath of all Moscow workers.

In spite of the fact that more than 200 enterprises were evacuated from Moscow and the number of workers in the city decreased to a sixth of the original, Moscow continued to be a major source of weapons and ammunition. It was then that the frontline troops received the first consignment of submachine guns and a month later, the Moscow workers had mastered their mass production. The Kompressor Works launched the production of the BM-13 jet-mortars called Katyushas. Frontline Moscow manufactured mortars of different calibres, shells for anti-aircraft and armour-piercing shells, anti-tank guns and other types of weapons and ammunition. Many industrial enterprises repaired tanks, artillery guns, motor vehicles, etc.

"We shall defend Moscow." This battle cry stirred the entire working class, all the nations and nationalities of the Soviet Union. "Comrade Muscovites, we are with you," wrote the citizens of Leningrad. "In close military co-operation we shall crush the nazi hordes. ... Stand firm, brother Muscovites."

In one of its issues of the period, the *Pravda* published a letter from Baku workers: "Our very own Moscow, today you are in danger. But you are not alone, the whole country is with you. The citizens of Baku, all the Azerbaijanian people are with you. Our friendship in these stern days is as strong as granite. It is the foundation of our coming victory."

The entire country helped Moscow. The Urals Area sent tanks and artillery, Siberia and Central Asia delivered weapons, ammunition and equipment and Baku and Grozny sent oil.

Accounts of the heroism of the working people of Moscow Region, of the great battle exploits of Siberian and Urals divisions, of the indefatigable labour of the workers of heroic Tula which in those days became the unconquerable bastion at the southern approaches to the capital, will be handed down from generation to generation.

On October 16, 1941, the activists of the Tula Party organisation assured the Party Central Committee that the city's Communists would fight to the last drop of blood and never surrender the town. Thousands of industrial and office workers and housewives built fortifications. It was also announced that a workers' regiment would be formed.

Ivan Prokhorov, a turner at a small arms factory, enlisted bringing along a rifle his grandfather made in 1899, and which he had used in the Russo-Japanese War. At the time he made 76 notches on its butt, each for the number of killed enemy troops and then, in the course of the first Russian revolution, he added another six—the number of gendarmes which he killed. Ivan's father Nikifor took the rifle to the front in 1914 and the number of notches increased to 51. Nikifor was killed in action but his comrades saved the rifle and brought it to his son. In 1918, sixteen-year-old Ivan fought against the whiteguards and the number of notches on the butt increased. Now it was the nazi's turn to feel the old rifle's deadly sting.

Pending the arrival of regular Red Army units this regiment and the anti-aircraft gunners covered the town's approaches. Failing to take Tula in their stride the Germans tried to encircle it, but their plans were frustrated by the regular troops that were rushed to the town and the workers' regiment.

Working round the clock during the siege Tula workers kept feeding the front with weapons and ammunition.

"The Germans evidently have no idea that there is an operating factory on the advance positions," the workers used to say. When there was a shortage of spare parts to repair the tanks the workers themselves managed to find them. Taking along rifles and spanners and risking their lives they made their way to the forward lines and took the necessary parts off the damaged machines.

The defence of Tula struck the final chord in the October defensive battles at the southern approaches to Moscow. The enemy was stopped at the end of November thanks to the heroic efforts of the regular units, people's volunteer units and workers' battalions. All German attempts to capture Moscow failed. On December 5 and 6, the Soviet troops mounted a vigorous counter-offensive in the course of which they liberated 11,000 inhabited localities, including the regional industrial centres of Kalinin and Kaluga depriving the Germans of all chances of encircling Tula. The direct threat to the capital of the USSR and the Moscow industrial area was removed.

On a War Footing "We know," wrote the *Pravda* on the third day of war, "that victory over nazism, over the alien hordes that have invaded our country will be difficult to achieve and will impose on us no small sacrifices. It has to be clearly realised that victory depends on ourselves, on our selflessness, our discipline, on the productivity of our labour, on our organisation and on our willingness to sacrifice everything for the sake of victory."

The adverse circumstances in which the war began were not limited solely to the unexpectedness of the attack and the enemy's superiority in manpower and weapons. The military economic resources of the fascist bloc states and the countries overrun by Germany surpassed the resources of the USSR by more than two times. Victory could be achieved only by bringing these advantages to naught. That meant that the home-front effort had to match the effort of the frontline troops.

The primary task was to put the economy on a war footing, for it was geared to peaceful production and only spe-

cialised factories were working on orders for the defence commissariat.

Gradually the national economy and the life of the country as a whole were converted to war rails. Thousands of large and small engineering and other factories were switched to the production armaments, ammunition and other military equipment. Even the light and the food industries began catering to the needs of the Armed Forces. Tremendous difficulties confronted the workers.

Only one thought was uppermost in the minds of the workers in the frontline zones and in all other parts of the country and that was to save the property of the people from the enemy. On the third day of the war, an evacuation council was set up by joint decision of the Central Committee of the CPSU(B) and the Council of People's Commissars of the USSR. First and foremost it was necessary to save the basis of the industry and the entire economy namely the giant heavy industry enterprises in the western parts of the RSFSR, the Ukraine and Byelorussia. They had to be dismantled and their equipment evacuated under enemy fire and then reassembled in the interior of the country. This was an unprecedented task.

Here is an entry in a diary of the director of Zaporozhstal Works A. N. Kuzmin:

"August 18, 1941. . . . In the afternoon the enemy opened artillery fire on the townships on the left bank of the Dnieper in the vicinity of Zaporozhye. At 17:23 hours the supply of electricity to the factory's substation was cut off. . . . At that moment the heart of the Dnieper Hydroelectric Power Station, the favourite offspring of the First Five-Year Plan, stopped beating. Someone's firm hand short-circuited the generators, drained the lubricating oil out of the turbines and lighted the fuses leading to boxes of explosives." But this was not the end; it was only the beginning of a heroic period in the history of the factory which before the war was called the gem of the country's southern metallurgical industry.

While the Sergo Orjonikidze People's Volunteer Regiment formed in Zaporozhye and regular army units were on the defensive on the left bank of the Dnieper, seven thousand Zaporozhstal workers dismantled the factory equipment and loaded it on freight trains. At night many people would

go to the defence line on the river bank. Here there were no engineers, technicians and workers—only commanders, commissars and fighting men. . . . Some would not return in the morning, but the tempo of work did not fall off. It took 45 days to dismantle and load the equipment. And those who took part in this operation later said that on October 3, 1941, when the last of the 16,000 train cars left for the east, the only thing that remained to be done was to sweep the floors of the shops.

Many other industrial enterprises were dismantled and evacuated to the east in the same way. Those who took part in this heroic operation and then travelled to the east with the dismantled equipment will never forget those days: the roar of Junkers dive-bombing the train, the piercing whine of falling bombs, the feverish chatter of machine guns drowned by the thunder of explosions, the privations of the journey in freight carriages, the cold and hunger and search for firewood, the wearisome stops at stations and sidings packed with people and railway carriages.

Frequently German troops entered a town a few hours after the last east-bound train with dismantled factory equipment had pulled out of the station. The last carriage with equipment of the Azovstal Factory in Mariupol pulled into the Sartana Station at 11:00 hours on October 8, and in the afternoon the Germans managed to break into the town. At the Zuyevka power station, for example, the workers had to make a tremendous effort to dismantle it before the advancing enemy would reach it. They mined the still standing units to be able to blow them up at a moment's notice and continued to work until the military command gave them ten hours to complete the evacuation. They had to dismantle a powerful generator, a job which in normal conditions would have required seven days. Once again the impossible was accomplished; it took the workers only eight hours to dismantle and load the generator on railway platforms.

In view of the enemy's rapid advance and the shortage of transport facilities the workers of the Donets Basin and other regions had to destroy all that could not be evacuated. Nonetheless, the Germans failed to disrupt the evacuation of industrial enterprises from the frontline zones.

Day and night trains thundered in opposite directions: some carried troops and supplies to the frontlines, others transported the equipment of dismantled enterprises to the Urals Area, Siberia, the Volga Area, Kazakhstan and Central Asia. These places were selected not only because they were far from the frontline, but also because a powerful coal and metallurgical industry arose in the eastern parts of the country in the course of the pre-war five-year plan periods. Moreover, they had all the necessary conditions required to site the enterprises, put them in operation and rapidly organise the production of military output.

This was the greatest resiting of industrial enterprises in the history of wars. Let us recall that in the First World War the tsarist government tried to organise the evacuation of material values from the zones of military operations. Some industrial enterprises were dismantled and their equipment evacuated. About 100,000 railway cars were used for the purpose. But in the summer and autumn of 1915, about 80,000 carriages were still en route in various parts of the country. Factory offices did not know the whereabouts of 35,000 of them, but the rest were unloaded in various places and frequently the equipment of one factory was unloaded at stations far removed from one another. In the spring of 1916, only 70 of the 443 evacuated factories were put in operation and another 112 were still being assembled, and no one knew exactly where to look for the equipment of the others.

Now let us compare these figures with those showing the scale, the rates and the effectivity of the evacuation of industrial enterprises during the Second World War.

In the period from July to November 1941, Soviet railwaymen evacuated 1,523 industrial enterprises using 1,500,000 railway carriages and platforms, or 30,000 trains, right under the enemy's nose. More than 10,000,000 people were evacuated to the east. To grasp the full significance of this heroic accomplishment it should be noted that in the early phase of the war alone the Luftwaffe dropped more than 400,000 bombs on Soviet railway junctions.

These were exceptionally difficult months. By the end of 1941, the national economy found itself in an extremely serious situation: a number of large iron and steel plants had

remained on occupied territory and the pits of the Donets and the Moscow coal basins were made inoperative. There was an acute shortage of raw materials at the aircraft, tank, ordnance and ammunition factories. Moreover, the equipment of the evacuated factories was still en route. Suffice it to say that the Commissariat for the Aircraft Industry evacuated 85 per cent of its factories. From June to December, the gross volume of industrial output dropped 52.4 per cent and that at a time when the army needed ever more weapons. Not a day, not an hour was to be lost.

The only way to offset the loss of the economically extremely important part of the country was to put the evacuated enterprises in operation in the minimum of time and create a powerful military-industrial base in the east.

One can judge of the rates of construction of defence industry enterprises in freezing December weather from reports published in a Sverdlovsk newspaper.

"December 2. Office workers, housewives, students, actors and musicians, people who never had anything to do with building work arrived at the construction site. Wielding pickaxes and spades they started digging the foundation area taking over the experience of the skilled workers in the process.

"December 3. The tempo of work mounts with each minute. There are day and night shifts. . . . The workers are preparing the footing for buckstays.

"December 5. The workers are putting up buckstays for the shops.

"December 6. Much has changed at the construction site in a single day. The workers are putting up the walls. The night shift has built supports for the frames of the new shops.

"December 7. The public is worried that severe frosts might impede the tempo of construction. Hundreds of people participated in a mass *voshkresnik* at the construction site.

"December 8. Walls are being erected, rafters put in place and central supports—columns for roof trusses—erected.

"December 9. Lateral spans are being installed at a rapid pace.

"December 10. All the columns on Sector No. 1 have been put up.

"December 11. A momentous day at the construction site:

work has started on the assembly of the trusses. The first was put up at 12:37 hours.

"December 12. All the trusses have been assembled on Sector No. 1... in less than six hours.

"December 13. There was a raging Urals blizzard. But neither the wind nor the snow slowed down the pace of construction.

"December 14. The last blows of the hammer, the last spadefuls of earth... and the project has been completed. The scaffolding and connecting platforms have been pulled down. One is amazed at the size of the shop. Hundreds of machine tools can easily be installed in it."

The reassembly of the Kirov Works which had been evacuated from Gorlovka took place in very difficult conditions. Without waiting for the designers to complete their work, the building workers built the walls of shops on the basis of the blueprints which they received daily, and the assemblymen installed machine tools while the shop was still without a roof.

The construction of one of the principal shops was commenced on an empty lot on December 23, 1941 and on the following day the first four machine tools were already installed. By the close of January 1942, the shop was working at a half of its rated capacity. It was still without a roof and got one only in March.

A fairly large number of the evacuated enterprises was put up on the basis of enterprises whose construction had been launched just before the war. The huge tank factory, the famous Tankograd, appeared as a result of the merger of the Leningrad Kirov Works, the Kharkov Diesel Plant and the Chelyabinsk Tractor Plant. The workers who built it displayed exceptional labour heroism and organisational abilities. A leading role among them was played by Communist K. Y. Titov, a veteran worker of the Leningrad Putilov Works. Subsequently the *Leningradskaya Pravda* carried an article about him which read in part: "Is there anyone in the Soviet Union who has not heard about the legendary Tankograd which appeared in the Urals Area at the will of the Party? The electorate of the Kirov District and all Leningraders should know that a modest worker, a former turner, Kuzma Titov was one of the organisers of this won-

derful tank town.... Titov's shop was an unfinished shell without the necessary equipment. Young men and juveniles, collective farmers and housewives from Leningrad, Kharkov and the Urals Area, many of whom had never been to a factory gathered here in an almost open field in the grim winter of 1942. They had to be moulded into a production collective.... And Titov with his comrades coped with this task. He could always be found in the shop at any hour of the day or night. He lived in it.... He showed people how to work, he instructed them, explained what they did not understand and infected them with his tremendous enthusiasm. He was more than just a shop superintendent; as befitting a Communist he became the leader of this collective, its thoughtful guide."

Tanks were made of a special sort of steel, but the Magnitogorsk Works had no furnaces with acid hearths for smelting armour steel and no rolling mills to shape it into sheets. Prior to the war, the Urals Area produced a very small amount of high-grade steel and no armour steel at all. It was manufactured by the southern iron and steel industry in the Ukraine and the Donets Basin which had come under German occupation. The front, however, needed more and more metal and experiments were launched at the Magnitogorsk Works. Led by the works' director G. I. Nosov, a brilliant metallurgist, a team consisting of engineer V. A. Smirnov, foremen M. M. Khilko, M. G. Verazov, Y. S. Sazonov, steelmakers A. S. Pozdnyakov, D. N. Zhukov and T. I. Avramenko developed a new technology of smelting armour steel in large capacity open-hearth furnaces.

After six failures they produced armour steel of the needed quality. It was tested and approved.

That was only the beginning: now it was necessary to roll the steel into armour plate, but the works did not have a rolling mill. The chief mechanic N. A. Ryzhenko had a bold plan. His idea to roll sheet armour on a blooming mill specially modified for the purpose was supported by Director G. I. Nosov and the People's Commissar for the Iron and Steel Industry I. F. Tevosyan.

The workers enthusiastically welcomed the plan. "We began to work on our idea directly in the shop," wrote N. A. Ryzhenko. "We toiled furiously as though we were

frontline soldiers, unheeding of ourselves and of time. Tracing paper and drawing pens remained in the designing rooms. We made our calculations and designs in pencil in notebooks and on sheets of metal. All the necessary books, charts, tables and manuals were with us in the shop. There was a shortage of tools, materials and equipment, and those we made ourselves. People remained in the shop for five days in a row almost without sleep adapting the blooming mill for rolling armour plate, surmounting dozens of unforeseen technical difficulties in the process."

At last the first sheet of armour steel came off the mill. This was victory and the smelters congratulated each other. No bolder experiment had ever been undertaken in world practice and in those conditions it signified a technological revolution in the iron and steel industry. Now that the new technology of producing armour plate had been evolved the rest was up to the workers. In October 1941, steel output exceeded the September level by 7.5 times, in November by 24 times and in January 1942 by 98 times.

The engineers and workers at other iron and steel works displayed no less inventiveness. It took the workers of the Kuznetsk factories a very short time to elaborate and master the technology of producing high-grade rolled steel in an ordinary rail mill. In the first six months of the war the Zlatoust metallurgists mastered the production of 78 new brands of steel and the production of 50 new brands was organised at the Serov Iron and Steel Works. Thirty old iron and steel works in the Urals Area which formerly produced only ordinary grades of steel were reconstructed from the ground up, and switched to the production of pig iron and steel for the armaments and munitions industries.

Heavy engineering, automobile and tractor factories were reorganised on a large scale. The Uralmash Works, which Maxim Gorky called the father of many factories and which prior to the war specialised in the production of unique machines started manufacturing armour hulls for heavy tanks.

The Kirov Works in Leningrad launched the serial production of new heavy tanks within a few days following the outbreak of the war. As the enemy approached the city a portion of the works' equipment and its personnel were evacuated to the Urals Area where, during the war, the works

which merged with other industrial enterprises increased output nine times and turned out 18,000 heavy tanks and self-propelled artillery mounts, 48,500 tank diesel motors and 17,500,000 half-finished parts for various types of ammunition.

The Stalingrad Tractor Plant also began producing tanks and the Gorky Automobile Factory mastered the production of tanks and armoured cars.

Far from the front, beyond a chain of rocky mountains the Red Army had a powerful arsenal—the Urals Area. But there were others. In the Volga Area, Siberia and Central Asia tank, aircraft, ordnance and other armaments factories were built. The evacuation of factories from the western regions gave a tremendous impetus to industrial development in the eastern parts of the country.

Tens of thousands of workers left their homes and taking along only the most essential things settled down in other parts of the country. The Government helped them as best it could at the time. The evacuation was conducted at state expense and the workers evacuated with their enterprises received their full wages (the average for the last three months) and travelling expenses amounting to a full monthly wage to the head of the family, a quarter of his wage to his wife and an eighth to each non-working member of the family. The population of Siberia, the Urals Area and Central Asian republics shared their homes, clothing and food with the evacuees.

The spirit of internationalism fostered in the Soviet people by the Party passed its test in the war. Their common grief, hardships and sufferings and the general belief in the ultimate victory over the nazis created a genuine atmosphere of fraternity. The hopes of the nazi "theoreticians" that the war would split the Union of Soviet Socialist Republics and lead to strife among its numerous nations and nationalities did not and could not materialise.

The resiting and rehabilitation of industry in the east conducted in such a brief span of time, and the conversion of the entire national economy to a war footing were a great achievement of the working class, proof of its "incredible endurance" as the Western authors, astounded by such unparalleled heroism, still say today.

The Unvanquished "I, a citizen of the Union of Soviet Socialist Republics, ... swear that I shall spare neither my strength nor life itself in serving the cause of liberating my people from the German-fascist invaders and hangmen. ... I shall fiercely avenge the razed cities and villages, the blood and death of our wives and children, fathers and mothers, the violence and torture perpetrated against my people. ... I swear actively to assist the Red Army in every way ... and I shall never violate this pledge."

The Byelorussian partisans took this oath when the enemy invaded their republic. An estimated 374,000 Byelorussians were united in partisan detachments and over 70,000 were active in underground organisations and groups. Moreover, the partisans had a reserve of almost 400,000 people ready at the first signal to go into action with the partisans and who directly participated in partisan warfare. All sections of the population fought against the nazi "new order": 17 per cent of the Byelorussian partisans were workers, about 40 per cent were peasants, more than 20 per cent were representatives of the intelligentsia, over 12 per cent were students and over 11 per cent servicemen.

A mass partisan movement spread throughout the occupied territory. It could be said that the land burned under the very feet of the nazis. Partisan warfare was not a new feature in the history of wars, but it had never assumed such proportions as in the Great Patriotic War.

On June 29, 1941, the Party and the Government instructed their organisations and bodies in the frontline zones to launch a partisan movement behind enemy lines. Actually, however, preparations were started some time before. Many workers who at first went into action with people's volunteer units and destroyer battalions, formed partisan detachments. This happened in Liepaja, Minsk, Mogilev, Kiev and Odessa, in Pskov and Moscow regions and in other parts of the country. For instance, Partisan Detachment No. 39 organised at the Kirov Works, a detachment consisting of the Izhora factory workers and other partisan units were operating in the vicinity of Leningrad. District Party committees in Moscow selected 1,230 of the capital's workers and sent them on missions behind enemy lines.

Millions of patriots on occupied territory and in other parts of the country responded to the Party's appeal to fan the flames of partisan warfare behind enemy lines. Characteristic in this respect was the request submitted by non-Party member, 34-year-old railwayman Konstantin Zaslonov, a son of a worker Red Guardsman who fought for Soviet power in the Civil War. Konstantin was also a worker, a proletarian who had been a shepherd, a cobbler and a fitter. In 1937, he was placed in charge of a locomotive depot at a railway station and occupied this post when the war broke out. Supervising the evacuation of the property of Orsha Railway Station he had to leave the zone of military operations. But his greatest wish was to go into action against the enemy.

In the autumn of 1941, Konstantin Zaslonov wrote the following letter to the Party Central Committee and the People's Commissariat for Railways: "Our country is in flames and life dictates that each citizen in whose breast beats the heart of a patriot, who breathes and wants to breathe the healthy Soviet air, should rise to the defence of our country. I ... request your permission to organise a partisan detachment. ... Should it be granted, I shall form my detachment not of people who only imagine what war is like and who have only a mental picture of blood and corpses and broken skulls. ... I shall pick only those people, and in effect they have already been picked, who have seen and lived through all this ... who have already wounded the enemy, who came face to face with him and who got the best of him." His request was granted. Returning to Orsha Zaslonov managed to get into the good books of the invaders and organised a group of saboteurs in the locomotive depot. From November 1941 to February 1942, he and his group put 150 locomotives out of commission, derailed 98 German troop and freight trains and carried out a number of other subversive acts. When it became obvious that the Germans were beginning to suspect the group, it went into hiding in nearby forests and became a partisan detachment which shortly grew into a brigade. It was here that Konstantin Zaslonov joined the Party. "I request to be accepted to probationary membership of the CPSU(B). I promise honestly and fully to observe the Rules of our Party and fulfil any Party and state assign-

ments sparing neither my strength nor my life. Konstantin Zaslonov." Soon the Central Committee of the Communist Party of Byelorussia appointed him commander of all partisan forces in the Orsha zone. On November 14, 1942, Konstantin Zaslonov met a hero's death in an unequal battle against the Germans in the village of Kupovat.

The partisans effectively assisted the Army. Here is an excerpt from the minutes of a conference called by Göring on August 6, 1942, with the heads of the Nazi occupation authorities.

Ostland Reichskommissar Lohse: "I've been crying for help for four months now."

Göring: "Can't you ensure a certain degree of defence against the partisans?"

Lohse: "It is absolutely impossible."

An official report of the Nazi Security Police and SD on the occupied territory of the USSR stated that the occupation troops are in such terror of the partisans that it borders on a psychosis and the Nazis themselves "refer to some sort of 'partisan hysteria'."

The partisans hit hard, at the enemy's communications, blowing up railways and mining roads. Partisans operating behind the lines of Army Group Centre derailed 238 locomotives from February to July 1942 alone or more than Nazi Germany could produce in a month. On the night of July 29, 1943, Komsomol member Fyodor Krylovich planted mines on a fuel train which was standing in the Osipovichi Station next to trains carrying weapons and ammunition. The blast and the fire demolished four trains, including a train with "Tiger" panzers. That night the Wehrmacht lost 30 of these machines—a monthly output of the German armour industry at the time.

The biggest operation in the history of the "rail war" took place in August and September 1943. It involved partisan detachments in Byelorussia and Lithuania, the Leningrad, Smolensk, Orel and Kalinin regions in the RSFSR and in other occupied regions. During these two months the partisans operating on a territory 1,000 kilometres wide and 750 kilometres deep blew up about 300,000 rails, dozens of bridges and derailed hundreds of German trains with troops

and matériel on a number of crucial lines. As a result German rail transportations dropped 40 per cent just when the Soviet Army was conducting a major offensive—the Kursk Battle.

These were very telling blows. All in all the partisans wiped out 1,500,000 enemy troops, derailed 18,000 trains with troops and equipment, routed hundreds of garrisons and demolished thousands of motor vehicles, tanks and aircraft. The struggle of the Soviet people behind enemy lines was not confined to partisan warfare alone. Just as important was their most extensive sabotage of the Nazi occupation policy.

On June 29, 1941, Hitler issued an edict authorising Göring to employ all means in the seized territory "essential for the fullest use of the discovered resources and economic capacities in order to expand and develop the economy in the interests of the German war effort". Göring frankly disclosed the invaders' primary economic objective when he said: "I intend to plunder and do so effectively."

The Nazis seized food, raw materials, finished products and industrial equipment for transportation to Germany. They shipped machine tools, dynamos and motors out of Latvia, mining equipment from the shale quarries in the Leningrad Region, a silk factory from Mogilev, whole industrial enterprises from Minsk and Kiev, and so forth. All told the invaders shipped 239,000 electric motors, 175,000 metal-cutting machine tools and other equipment out of the occupied territories to Germany.

At the same time the Nazis tried to revive the production of certain commodities on the spot. They had seized important economic areas and intended to use them in their interests. The Herman Göring Concern formed a special eastern branch for the purpose of exploiting the Soviet heavy industry. The Berg-Hütte Ost Company intended to lay its hands on the Soviet coal industry, the Kontinental-OI, Ost-OI, Karpathen-OI, Baltink-OI planned to gain control over the oil industry, and the Energiebau-Ost, Energieversorgung Ostland and the Energieversorgung Ukraine had their eyes on the power industry. The Siemens firm tried to restore the Dnieper Hydroelectric Power Station. The Nazi authorities also intended to draw Austrian, Dutch, Belgian, Rumanian

and Hungarian capital into participating in the development of the occupied regions of the Soviet Union.

These plans, however, were not destined to materialise. The workers who remained behind the enemy lines performed their supreme patriotic duty by frustrating the invaders' efforts to restore the industry in the occupied territory and thus economically sustain the maimed potential of the Third Reich.

The organised sabotage conducted under the guidance of Party and Komsomol organisations and the spontaneous resistance movement whose results were not always visible but which, nevertheless, were quite impressive in their sum total were two components of the struggle against the invaders on occupied territory.

The nazi Reichskommissar of Minsk reported on December 3, 1942: "If not 100 per cent negative, the mood of the broad masses of the population is nevertheless cold and indifferent. We have disclosed strong communist influence among the workers at some enterprises, particularly at the Avtomat bakery and the shoe factory." The report embellished the actual state of affairs, for the people of Minsk loathed the invaders. There were many more underground Party and Komsomol organisations: besides the above enterprises they were active at the Myasnikov, Voroshilov, Bolshevik, Krasnaya Zarya and Byelarus plants and radio factories, at Heat and Power Station No. 2, the woodworking factory, automobile repair shops and other enterprises.

The underground struggle in Minsk increased in scope in 1943. In July and August, Minsk railway workers sabotaged the repair of 155 locomotives, and in the latter half of the year, they carried out over 50 major subversive operations.

Workers, members of underground organisations in Kiev, Odessa, Sevastopol, Dneprodzerzhinsk and other temporarily occupied towns waged a courageous struggle. The Kaunas railwaymen handling locomotive repair shunted the engines into the depot and quickly draining the hot water out of the boiler substituted it with cold water. As a result, minute cracks appeared in the boiler walls and the plugs leaked. Such locomotives, many of which were used to haul German troop trains, would break down to the astonishment and fury of the Germans.

On November 7, 1942, the nazi director of the Dzerzhinsky Works reported to his superiors in Berlin that prior to the occupation it was "a giant factory. We have been unable to restore it. Now our monthly output is equal to 80 carts, 1,500 files, thousands of rail spikes. . . . The Bolsheviks have given the younger generation a good school education. They are not only literate, but also have a good knowledge of geometry and algebra. It is hard to come to terms with them and to make them work."

There were many facts proving that it was indeed impossible for the nazis "to come to terms" with the Soviet workers. Here is one of them.

The occupation of Mariupol (now Zhdanov) by the German troops was followed by the arrival of Krupp's representatives who intended to take over the iron and steel factories. But all their attempts to put them back in operation failed. Just then the Germans found out that M. N. Mazai, a steel-maker and innovator was hiding somewhere in the vicinity. He remained at his open-hearth furnace until the Germans broke into the town.

Then Krupp's men decided that they would be able to reopen the factory, only with the help of Mazai and his colleagues. A police hunt was mounted and in spring of 1942 a traitor denounced Mazai whom he saw in the street.

Police Chief Schallert was generous with promises. "We want to put you in charge of the factory. Experienced workers will come to you. They will respect you as a specialist and organiser. Germany needs metal. . . . She will reward you. You'll be rich."

Mazai was contemptuously silent. He knew the real meaning of respect, wealth and happiness. His father, Nikita Mazai, a soldier of the Revolution paid with his life so that his son and all people of labour would have all these things. And Makar Mazai also wanted to see his people enjoy all this. He owed everything to the Revolution, Soviet power and his own labour. A farm labourer in the Kuban Area, he was 20 and semi-literate when he got a job at the Ilyich Works in 1930. Here he studied, acquired a trade and became a foreman, a man widely known in the country, and a statesman.

"The Soviets are on their way out. Look at the map: who's winning?... Think over our proposition," Schallert persisted.

Makar did not reply. He knew life, he knew himself and never changed his convictions. Addressing a Congress of Soviets in the Kremlin several years earlier he said: "We know that the fascists in Germany and other countries are hastening their preparations for an attack on the Soviet Union. That is why I call upon all Soviet steelmakers to give our country as much steel as she needs to drown the entire nazi pack." His deeds matched his words. He smelted steel for his country. But he would make no steel for the nazis.

The Germans then resorted to torture and when that, too, produced no results they shot him. Makar Mazai's short but flaming life ended, but memory of him is alive in the hearts of the people.

The Germans were just as unsuccessful in their efforts to persuade specialists at other industrial enterprises in Mariupol to co-operate with them. At the Stalkonstruksia Plant they shot the veteran driller Shevchenko, head of a team of fitters Perelyshenkov, a Communist, and many others.

Having occupied the Donets Basin the Germans hoped to replenish their depleting coal reserves by working the local mines. But their yield was so low that the occupation authorities were forced to bring in coal from Silesia and other parts of Western Europe.

With great difficulty the invaders managed to restore and put in operation a small number of industrial enterprises whose output was crucial to the mounting requirements of the Wehrmacht. Among them were municipal services, building materials factories, some machine-building plants and small pits. For a short period of time they succeeded in partially restoring the manganese mines and oil fields in Western Ukraine, and began extracting chrome, iron ore and other minerals in minute quantities.

Another problem which the Germans found very difficult to cope with was that of organising the normal operation of the restored enterprises. Having undertaken to restore the Zaporozhstal Works, the Stahlwerke and Braunschweig firms set themselves the immediate objective of organising the production of shells at the enterprise and get it working at full capacity within two or three years. Helped by the

police the self-styled masters herded 3,500 workers to factory and brought in a considerable quantity of machine tools, presses and other equipment from Germany. But only 35 machine tools were installed and only five or six of them were in working order. The workers subtly sabotaged their assembly making it impossible to organise large-scale production of shells.

No matter how hard they tried the Germans failed to launch production. Only a handful of traitors worked for them, while the bulk of the workers sabotaged production. Whenever possible they kept to their homes turning up at the enterprises only for the morning and evening roll calls. When the German supervisor would come down on the workers for producing so little, they would blame the tools, the bad ventilation, shortage of material and invent innumerable other excuses.

Soviet workers fought the enemy with all and every means at the front and behind his lines. The nazi "new order" on the occupied territory of the USSR collapsed just as did Hitler's plan of a *blitzkrieg* against the Soviet Union.

The Soviet Home Front Forges Victory

In the summer of 1942, the enemy occupied a territory which before the war had 32,000 industrial enterprises employing approximately 4,000,000 people. While in the pre-war year of 1940, Germany was producing from 1.5 to two times as many basic heavy industry commodities as were produced in the USSR, in 1942, her superiority in this sphere increased from three to four times. Nevertheless, in 1942, the Soviet industry manufactured 25,436 combat planes, 24,668 tanks and 34,000 guns. In this period Germany produced 14,700 planes and 9,300 panzers. As regards the number of guns it was a third of the total made in the Soviet Union. Thus, in the most difficult year of the war the Soviet working class considerably increased the production of armaments.

By the end of 1942, the Soviet defence industry not only regained its potential but largely augmented its pre-war capacities. The country created a well-organised, rapidly developing military economy, a very important factor which enabled her to bring about a radical turning point in the Great Patriotic War.

A growing number of workers undertook to fulfil their work quotas 1,000 per cent. This movement was inaugurated by milling-machine operator at the Nizhni Tagil Works D. F. Bosiy. With the help of an appliance which he had invented he managed to fulfil his work quota 1,480 per cent.

At Baikal Mines production records were set by driller A. I. Semivolos, who had arrived from Krivoi Rog. Competing with him was the driller of the Krasnouralmed Trust in the Urals Area I. P. Yankin. It was not long before thousands of miners were using their method of multiface boring.

In those days the front-rankers were called the home-front guard.

The great news of the rout of the German armies at Stalingrad, an augury of the ultimate victory over nazi Germany, was received with joy throughout the country inspiring the people to work with redoubled energy without regard for hardships and privations.

In the winter of 1943, a number of ordnance factories undertook to manufacture enough above-plan production to arm 46 regiments. Similar obligations were assumed by tank, aircraft, metallurgical and other defence industry enterprises. The workers of the Urals Area decided to increase the output of weapons and ammunition by 100 per cent in 1943. The desire of the workers to hasten the hour of victory by intensifying their labour effort, their high level of consciousness and lofty enthusiasm enabled them to exceed all the existing norms and set unprecedented production records.

There was nothing that the people could not overcome in their desire to smash the enemy.

Early in 1943, the inhabitants of Kuibyshev came forward with an important initiative. Their proposal to accumulate above-plan production into a special fund of the Red Army High Command was supported by the working class in all the rear and frontline areas. Within a month the Uralmash workers contributed 350 tons of high-grade steel to the fund, and in March and April 1943 it received 1,000 tons of pipes and other items. This was enough to equip 15 artillery regiments.

These were by no means easy successes. In 1943, the Party and the Government put an end to serious interruptions in the work of the fuel, metallurgical and power industries, and

channelled additional labour power and investments into these fields of production, started large-scale capital construction and introduced other efficient measures. At the same time effective steps were taken to overcome the shortcomings in the work of a number of Party and economic organisations in the major industrial areas. This created favourable conditions for expanding military production.

The drive for rigid economy continued to spread and involved about 90 per cent of industrial workers. Munitions factories alone saved 27,000 tons of fuel and 6,000 kwh of electricity. This meant that the working class gave the front and the fund of the High Command millions of rounds and shells and other military equipment over and above the plan.

At their rally back in 1937, the Stakhanovites of the Donets Basin iron and steel industry decided to support the proposal of the Mariupol steelmaker Makar Mazai to organise a competition between workers of identical skills. The proposal was promptly taken up also by miners, rollers, turners, smiths and many other workers. The competition acquired a particularly wide scope in 1943 and 1944 when workers of 50 key trades decided to join it. Makar Mazai was dead, but his splendid initiative remained alive and his words "We'll seal your throats with steel" which he hurled at the nazis when they said that he would be killed if he refused to work for them, were not forgotten.

One of the numerous followers of Makar Mazai Alexander Chalkov, a steelmaker at the Kuznetsk iron and steel works, produced 76 tons of above-plan steel in six days of July 1943. In the last two years of the war he smelted enough above-plan steel to manufacture 24 heavy tanks, 36 guns, 15,000 mortars, 100,000 mines, 100,000 hand grenades and 18,000 submachine guns.

Soviet factories considerably enlarged the output of military equipment in the first six months of 1943. In this period the workers of the Urals Area doubled the output of weapons and ammunition compared with 1942 and supplied the industrial enterprises with ten times the amount of manganese ore as they received in the whole of the pre-war year of 1940.

In September 1943, tank and aircraft factories attained their highest wartime level of production.

There were special "frontline" shifts such as "For Soviet Kursk", "For Soviet Kharkov", "In Honour of Dnepropetrovsk Divisions", etc., at industrial enterprises. Now workers of whole regions, territories and republics pledged to increase output to mark the approaching anniversary of the October Socialist Revolution. At a conference on October 11, 1,700 front-rank industrial and transport workers of Sverdlovsk declared: "We, Urals workers, are launching a new offensive on the home front. To the salvoes of the Kremlin guns we shall add our own labour salute which will hit hard at the nazis." These were not empty words, for the industry of the Urals Area produced two-thirds of the total number of tanks made in the Soviet Union. This meant that more tanks were manufactured in the Urals Area alone than in the whole of Germany.

Beginning with 1943, mounting importance was attached to the Communist Party's slogan: "With less workers, more military output". Yekaterina Baryshnikova, a former planning machine attendant at the Moscow State Ball-Bearing Plant No. 1, recalling its impact on the workers, said: "The Soviet Army was advancing rapidly then, and it was up to us, home-front workers, to work faster, too. Often I would remain in the shop for three days and nights in succession."

Occasionally one hits upon a solution to a problem suddenly, after months of futile search. One day it occurred to Baryshnikova that the arrangement of the lathes in her shop could be improved. The administration agreed and the lathes were moved according to her plan. On November 15, 1943, three women workers more than doubled their quotas.

"Some were sceptical of our venture and said that modern young people were overconfident and that multiple-lathe attendance was impossible in our shop.

"Of course it was not easy to do the work of two people, to operate two lathes. Our bodies ached and our hands trembled towards the end of the shift. But was it easier at the frontlines?

"When the shift was over and we raised our heads we saw bright letters spelling the words: 'Greetings to the glorious home-front workers'."

Other workers promptly followed the example set by Ba-

ryshnikova's team. By the end of the year, Komsomol teams were able to send 18,000 of their members for service in the Army or to other jobs, without slackening the rate of their work. Thanks to the more efficient planning of the working day, the improvement of technology and the extensive introduction of Baryshnikova's method the industrial enterprises were able to reduce the number of workers by 48,000 by April 1944.

During the war, the Soviet working class carried out the very important switch to line production. The Krasny Proletary, the State Ball-Bearing Plant No. 1 and the Borets and Frezer factories were the first to go over to line production in 1943. Line production, as a higher form of the production process, led to a considerable rise in labour productivity. An aircraft factory which went over to line production produced twice as many fighter planes in August 1943 as it did in August of the previous year without installing new equipment. The introduction of line production made it possible to raise labour productivity at aircraft factories by 20-25 per cent in 1943, and to augment the output of various tank parts at tank factories by more than 50 per cent.

The relentless onslaught of the Soviet troops left no doubt that the war would be won. Expressing the mood of the Soviet people, leader of a Komsomol team at a factory in Perm G. F. Semenyov made the following entries in his diary in 1944: "April 10. Odessa is free. Hooray! To mark the occasion our shift undertook to work still better. . . . As I have said before, it is simply amazing what strength we, Soviet people, have. We grow stronger as the war goes on and the greater the hardships the greater our persistence.

"... July 25. I am happy, very happy. I have been accepted into the Bolshevik Party. I am a Communist. From now on my life belongs to the Party of Lenin. Having joined it I assume great responsibilities. I shall live up to the trust the Party has placed in me. . . .

"October 26. . . . Each day brings us closer to victory. I am grateful to have been among my contemporaries who defended my country's independence in the Great Patriotic War. . . ."

Tremendously proud of their socialist homeland and the magnificent victories of the Soviet Armed Forces, the working class made a still greater effort on the home front.

Yegor Agarkov's team of electric welders at the Uralmash Works came forward with a splendid initiative designed to improve the assembly of tank turrets which was conducted in two sectors by relays of workmen. At the end of 1944, Agarkov suggested that the welders and the assemblymen should be united into a single team and shift to the method of line production. It was decided to reduce the number of senior foremen from two to one and shift foremen from four to two.

"Frankly speaking, not everybody was pleased with the idea," Agarkov later wrote, "and thought that nothing would come of it. But our calculations proved to be correct. After the reorganisation the team's labour productivity rose by 100-200 per cent. Four welders were released for other jobs." At the same time the team began to employ the new, automatic welding method developed by Academician Y. O. Paton, enabling a single welder to replace five or even six people.

Thousands of workers were quick to follow the example set by Agarkov's team. Warm and encouraging letters, including one from the men and commanders of the Urals Volunteer Tank Corps, former Uralmash workers, flowed to Agarkov's team from all parts of the country.

Thanks to Agarkov's method, the tank industry in a mere four months was able to dispense with more than 600 teams numbering 6,087 workers. By April 1, 1945, as a result of the enlargement of teams, sectors and shops it became possible to release 18,700 highly skilled workers and engineers.

Each ruble saved by the inventiveness of the workers and their broad participation in improving production methods strengthened the might of the Soviet Union and the power of its blows at the enemy. By the end of the war, there were thousands of multiple-lathe operators and Stakhanovites in the Soviet industry.

At the end of 1944, the iron and steel workers of Magnitogorsk and Kuznetsk appealed to industrial and transport workers to help the Red Army expedite the rout of the enemy on his own territory by increasing the flow of supplies. "To-

day, when the Red Army is preparing to launch a decisive offensive on the lair of the nazi beast and to deal fresh devastating blows at the enemy," the appeal said, "all Soviet people must help our troops to keep up their swift drive to smash Hitler's Germany within the shortest possible time and raise the banner of victory over Berlin. To do this we must make a still greater effort, surmount all difficulties and supply the troops with everything necessary for a complete and final victory."

The home-front workers responded by giving fresh impetus to the All-Union Socialist Emulation and steadily raising labour productivity. Reporting on the fulfilment of their undertakings, the Kuznetsk Basin workers wrote in January 1945: "We are proud that Kuznetsk steel, guns and machine guns, the superb armaments made by our people, are being used in action against the enemy in Hungary and Eastern Prussia."

Soviet workers were justly proud. From April 1942 to May 1945, the productivity of labour in industry rose by 74 per cent and the figure for some key branches of war production was even higher.

The supply of the Red Army with military equipment attained an exceptionally high level. The Ordnance Factory No. 92, which produced 95,000 guns from 1941 to 1945, daily armed an infantry division. In the last three years of the war the average annual output of tanks in the USSR was almost twice as high as in Germany, 1.5 times as high as in the USA and six times as high as in Britain.

The Red Army retained the superiority in weapons, which it attained in 1943 thanks to the efforts of the working class, throughout the remaining years of the war. During the final phase of military operations the Soviet Armed Forces had five times as many guns and aircraft and 15 times as many tanks as during the initial period of the war.

Though the Soviet Union had a third of the metal and a quarter of the coal compared with what Germany had at her disposal during the war it managed to produce twice as much military equipment as the nazis did. The annual output of eight to eleven million tons of metal was more effectively used in the USSR than the 32 million tons which were produced in Germany each year.

The Home-Front Workers The mass mobilisation into the Soviet Armed Forces and the losses at the front considerably depleted the ranks of the working class and altered its composition. In 1942, 7.2 million workers and office personnel were employed in industry, or 65 per cent of the pre-war total. In fact, however, the number of pre-war workers was much smaller, for following the outbreak of the war a large number of women, juveniles and pensioners who previously played only an insignificant role in the formation of industrial personnel, replenished the ranks of the working class.

What proved to be a great difficulty was that the problem of replenishing the working class had to be solved in the course of the war. Nazi Germany had mobilised the necessary manpower into the Wehrmacht and industry long before she attacked the USSR, whereas the Soviet Union had to do this in the involved conditions of the first months of the war.

The Council of People's Commissars set up a special committee which registered and correctly distributed the country's manpower resources. Its functions included the mobilisation of the able-bodied urban and rural population and the redistribution of the workers among various industries and people's commissariats.

The organised transference of office workers and people employed in shops and public catering to industrial enterprises was one of the forms of drawing the population into the sphere of industrial production. Building workers who were released due to the conservation of construction projects were given jobs at munition factories. Reservists in the older age brackets and some categories of servicemen were mobilised for work in the armaments industry. A part of the skilled personnel was exempted from military service and assigned to factories turning out military equipment. Invalids, if they so desired, were also drawn into industrial production.

The system of state labour reserves was reorganised, the training period at factory apprenticeship and vocational schools was shortened. Their pupils studied and manufactured munitions at the same time.

On the initiative of the people and with the support of

the trade unions the Presidium of the USSR Supreme Soviet decreed compulsory overtime work and cancelled annual and additional holidays. The extension of the working day made it possible to uprate production capacities by approximately a third without increasing the number of workers.

Veterans, the old guard of the working class, returned to their factories. Sixty-eight-year-old S. V. Vasilyev who had worked at the Serp i Molot Works for 35 years before retiring, wrote in the factory newspaper: "When I heard that the German fascists had attacked us, I felt that I, too, had to join the war effort. I am a 7th grade fitter and I think that I, too, can be useful to my country. I shall have my rest after victory."

In Rostov-on-Don 20 retired skilled workers went back to work on the first day of the war. "We fought against the German invaders in 1918, and now in the grim hour of need for our Motherland we cannot stand aside," they said. "We shall help the Red Army, the Air Force and the Navy to forge victory over the enemy."

Here is a letter written to the veteran workers by I. M. Olimpiyev, himself a retired veteran of the Sormov Works. "I am 66. Counting the time I have spent in tsarist prisons and in exile in remote parts of Siberia for taking part in the revolutionary struggle my service record is 53 years long. Recently I underwent a serious surgical operation and retired on pension. But I went back to work as soon as I heard that fascist hordes invaded our country. Veterans! In this stern and responsible hour we still have the strength to work like soldiers for our country and help our glorious troops rout the enemy."

A vast number of workers were needed to convert the entire economy and industry to a war footing. And it was then that Soviet women showed what they were capable of doing.

On June 25, the *Pravda* published a letter of the women workers of the Moscow Brake Factory to their husbands, brothers, fathers and sons in the Red Army. "... We shall do our utmost to replace you at your jobs and to supply you with everything you need." Many of them fulfilled double quotas, their own and their husbands'.

In 1943, women made up 40 per cent of the workers of the iron and steel industry and almost 50 per cent of the personnel of its forge and press shops.

"I shall never forget the women of those years," wrote Academician Y. O. Paton who worked in the Urals Area during the war. "They came to our factory in hundreds, often with their teen-age sons. They performed the heaviest manual labour imaginable, spent long hours in queues for food, brought up their children being both mother and father to them and bravely endured the anguish caused by the news that their husband, son or brother had been killed in action. They were the real heroines of the labour front and worthy of the greatest admiration."

The responsibility of training the newcomers fell heavily on the shoulders of the veteran workers.

Almost without exception teams which previously consisted of skilled workers now had 75 per cent of women and teen-agers. Fulfilling two and even three quotas a shift the old workers, nevertheless, managed to train and bring up the youngsters. Glancing back at this period V. V. Yermilov, a famous turner at the Krasny Proletary Works, said: "Our team, like all the other teams in the assembly shop, consisted of three foremen and three or four skilled workers."

"But once, in the middle of the day a group of boys evidently not older than 13 or 15 appeared in our shop. A bit scared they held each others' hands. The workers thought that they were schoolchildren being shown around the factory and that the excursion was ill-timed. Shabalin, our shop superintendent, clarified the situation.

"We'll give you ten lads," he told our team. "Devise your own methods of training them, but don't fail to fulfil your quotas."

"Putting our heads together we decided that since they were absolute novices it was necessary to impress upon them that things were not as difficult as they appeared at first glance and that they had no reason to be scared.

"To facilitate things we split the production process into a number of small operations entrusting those which required the least physical strength to the youngsters. With time this method produced fine results. The smallest of them stood on boxes at the machine tools."

In the first days of the war tens of thousands of school-children replaced the workers who went to the frontlines. An estimated 150,000 students went to work at factories in June and July 1941. All of them had to be trained to do the most intricate jobs. Moreover, it was necessary to make them feel that they had become a part of the working class and to inspire them with confidence that they too could achieve good production records.

In the autumn of 1943, 17,000 Komsomol teams won the right to be called "frontline" teams, and their labour productivity as a rule was 40 per cent above the planned level.

There was another, no less important factor which enabled the Soviet defence industry to increase production. Despite the steady inflow of insufficiently skilled replenishments, the number of workers who failed to fulfil their work quotas declined by 50 per cent in 18 months. The young workers proved to be worthy of their experienced instructors, and the number of workers who overfulfilled their quotas sharply increased. By the summer of 1944, they accounted for 40 per cent of the total and in the key industries 25 per cent of the workers fulfilled double quotas.

The number of workers fulfilling two, three and even ten work quotas and multiple-lathe operators continued to grow. In Moscow alone 15,000 workers fulfilled double and triple quotas. Among them there was an increasing number of workers who first came to factories in the initial period of the war. Youngsters, who but a short while ago stood on boxes to be able to operate a lathe, girls who had never been inside a factory before and women who devoted their lives to the upbringing of children now strove to keep up with the professional workers. They worked heroically and the war economy steadily expanded production.

Helped by the veteran workers, the old guard of the Soviet working class, these replenishments were able to live up to the glorious traditions of the working class.

The rapid replenishment of the working class by other sections of the population during the war mirrored not only the extraordinary situation prevailing in the country at the time, but also the great mobilisation capacity of Soviet society, the homogeneity of its socio-economic foundations and the ideological and political unity of the Soviet people.

From the Volga
to the Spree

On August 23, 1942, the German troops reached the Volga and came close to the Stalingrad Tractor Plant. The Communist Party advanced the slogan: "Not a step back."

The enemy encountered the resistance of regular army units and the courageously fighting destroyer battalion of Stalingrad Tractor Plant workers who were assisted by a destroyer battalion formed at the Krasny Oktyabr Iron and Steel Works. The Battalion Commander was G. P. Pozdnyshov, a worker at the sheet metal shop, and its Commissar was Secretary of the Works Party Committee K. M. Sazykin. Squad commanders were smelter A. P. Kuzmin, workers F. I. Komcharov and N. Y. Zheryakov and Secretary of the Shop Party organisation I. I. Tulyushkin.

The metallurgists arrived at the frontline in their oil-stained overalls straight from the open-hearth furnaces and rolling mills. Among them armed with a rifle and a hand grenade was the country's first woman steelmaker Olga Kovaleva. At first the men would not let her go saying that fighting was not a woman's job. But she insisted: "When I wanted to become a steelmaker some also said that it wasn't a woman's job. It's going to be this way: we've smelted steel together and we're going to fight together."

She went into battle just as she used to approach the open-hearth furnace squarely facing the flames. And when a hail of bullets pressed a group of men to the ground, she rose to her feet and led the battalion of steelmakers into a counterattack.

Olga Kovaleva, the Battalion Commander G. P. Pozdnyshov and 24 other men were killed in this engagement. The battalion of tractor builders also sustained serious losses, and there was heavy fighting in other sectors. But the enemy advance was checked. The workers formed new detachments. Platoons of tanks built and manned by the workers of the tractor plant went into action straight from the assembly line. The Krasny Oktyabr Works formed another detachment. One of its men was P. A. Goncharov who later became a famous sniper and Hero of the Soviet Union. Workers' battalions from the Barrikadny, Voroshilov, Dzerzhinsky and other city districts arrived at the frontline.

In September, the Germans began the storming of the city whose squares, streets and factories became the scenes of bitter engagements. The tractor plant remained operative until October 15 and when the enemy broke into its territory armed workers fought for every shop and passageway.

The *Red Star* newspaper wrote on December 1, 1942: "Yesterday's fitters, press operators and carpenters became resolute fighting men who set examples of courage and heroism. Dissolving in the mass of regular soldiers they fused with them to form an alloy which proved capable of withstanding all strains and stresses."

With a great display of courage the railway workers drove trains to Stalingrad under heavy artillery fire and air strikes. "The picture of the barren, black steppe scorched by the sun and flames often comes up before my eyes," recalled former engine driver Yelena Chukhnyuk. "It was almost impossible to break through. I say almost because we did manage to break through. It required some sort of superhuman effort to drive these trains across the steppe. We passed demolished stations, blazing trains and crippled, derailed locomotives. On countless occasions we had to uncouple the trains to get rid of a blazing carriage and then to put out the flames with extinguishers at the risk of being killed in an explosion."

During one of the numerous runs across the steppe Yelena Chukhnyuk was wounded in both legs. She was in terrible pain but refused to leave the locomotive. In 1942, Yelena turned 25 and the following year she and two other women engine drivers were awarded the title of Hero of Socialist Labour. They were the first transport workers to receive this high award.

In the autumn of 1942, the nazi newspaper *Berliner Boersenzeitung* grumbled that "the enemy observed no rules in battle. The Soviet system which produced the Stakhanovite is now creating the Red Armyman who fights furiously even in the most hopeless situation".

The indomitable valour of the Stalingrad defenders was matched by the patriotism of the working class, of all the home-front workers. The population of Moscow, the Urals Area, Siberia, Central Asia and other cities, regions and republics of the Soviet Union did much to ensure the victory

on the Volga. It was at Stalingrad that the Soviet Armed Forces attained an appreciable superiority in armour, artillery, aircraft and other weapons over the enemy for the first time since the outbreak of the war.

Wresting the initiative from the German troops the Red Army mounted a decisive offensive. In January 1943, the Leningrad Front broke the blockade of Leningrad and within four months and 20 days the Red Army operating in extremely difficult winter conditions advanced 600-700 kilometres liberating dozens of towns and hundreds of villages.

The enemy still possessing a tremendous military-economic potential started preparations for a retaliatory blow. The great battle which took place in the summer of 1943 at Kursk and Belgorod ended in a smashing defeat of picked German armies and once and for all turned the tide of the war in favour of the Soviet Union.

The victorious outcome of the Kursk Battle was predetermined not only by the courage of the men and the skill of their commanders, but, as in other cases, also by the mass heroism of the workers, of all those who took part in preparing it.

Building workers deserve special mention. They were not only military and civilian specialists but workers of other professions, collective farmers and representatives of the intelligentsia who took part in putting up defences and other military installations. The most serious jobs were assigned to building workers and Red Army sappers.

Preparations for the Kursk Battle lasted three months in the course of which industrial and office workers and collective farmers in the frontline zones dug more than 5,000 kilometres of trenches along the perimeter of the Kursk bulge, restored 250 bridges and over 3,000 kilometres of highways and dirt roads. The strategic railway Saryi Oskol-Rzhava built in an extraordinarily brief span of time made it possible sharply to increase the flow of troops to the frontlines.

The German defeat at Kursk brought the Wehrmacht to the verge of a catastrophe and inaugurated the Red Army's victorious drive along the entire front.

The Soviet troops battered the enemy in the Ukraine, Byelorussia, the Baltic republics and in the Crimea. Hun-

dreds of thousands of workers serving in the Red Army distinguished themselves in action.

Among those who won distinction in the battles for the liberation of the Donetsk Basin was Commander of the KV heavy tank Alexander Neguritsyn, a former Gorlovka miner. Crippling three panzers and wiping out about a 100 of the enemy he was the first to gain possession of a height dominating Gorlovka. His machine was damaged in the fighting but the crew quickly repaired it and were among the first to break into the town.

The line of the front moved further and further westward. Units formed of workers who took part in the Red Army's campaign of liberation with honour carried their labour and military banners to Berlin. Let us retrace the road covered by some of them.

In the summer of 1942, when the enemy was driving towards Stalingrad and the Caucasus the population of the Omsk, Novosibirsk, Kemerovo and Krasnoyarsk regions proposed to raise the Special Siberian Infantry Corps. Dozens of Siberian factories took part in outfitting it and the Siberian soldiers covered a glorious road.

Here is a brief history of one of the Siberian volunteer divisions.

The division was full strength by August 1942. Three times as many people volunteered as could be accepted. Two of its four regiments were raised in the Kuznetsk Basin, the third in Novosibirsk and the fourth in Tomsk. Its composition deserves special mention. Of a total of 13,634 men, 7,116 were working class, 3,963 were office employees and the rest collective farmers; 10,159 were Russians, 1,492 Ukrainians, 519 Byelorussians, 229 Tatars, 378 Chuvashes, 265 Mordovians, 147 Jews, 58 Kazakhs, 49 Kirghizes, 42 Bashkirs, 62 Uzbeks, 41 Armenians, 25 Georgians, 8 Azerbaijanians, 9 Tajiks, 14 Karelians, 16 Ossetians, 12 Udmurts, 18 Maris, 74 Komis and 17 people of other nationalities. Was this not proof of the great alliance of the working class and the peasants, of the fraternal solidarity of all the peoples of the Soviet Union? Communists and Komsomol members made up 45.2 per cent of its men and officers of whom 186 had already seen action in the Second World War and 25 were former partisans. Finally, 5,729 workers were privates, 1,059 junior command-

ers, 50 were political officers and 278 were part of its command personnel.

It went into action at Smolensk in November 1942 and fought its last battles of the war in the Baltic regions. Its officers and men received 14,500 combat medals and orders.

The formation, also at the initiative of the workers, of the Special Urals Volunteer Tank Corps was launched in the Urals Area at the time when the whole country was talking about the victory at Stalingrad.

"I should like to enlist for service in the Special Urals Volunteer Tank Corps," wrote I. G. Larichev, a Chelyabinsk building worker. "I pledge to give all my strength, knowledge and the blood of my heart to achieve victory over the deadly enemy of our people. I pledge to fight to the last for the liberation of my Soviet homeland which I love more than life itself. I pledge to my workmates with whom I built factories to be worthy of their respect, their affection and their trust."

Over 100,000 people in Sverdlovsk, Perm and Chelyabinsk regions volunteered for service in the corps. The workers decided to equip it wholly with output produced above the plan. A movement for the production of above-plan output and a fund-raising campaign was launched at the Urals Area industrial enterprises. Over 70 million rubles were collected. Within a short period of time the corps was raised, outfitted and dispatched to the frontlines.

Several months later the title "Guards" was added to its name.

In a letter to their fellow-workers in the Urals Area the corps' commanders and men wrote in October 1943: "You spent sleepless nights and gave all your strength to manufacture mighty tanks and self-propelled gun mounts, 'Katyushas', guns, mortars and submachine guns above the plan and paid for them with your own savings. . . . You have provided us with uniforms and boots, and your encouraging letters and warmth and care for our families gave us heart in battle."

This letter was read at all the factories, mines and collective and state farms in the Urals Area. In response the Urals workers pledged to double their assistance to the front. As regards the Urals Tank Corps it continued to strike heavier and heavier blows at the enemy covering a glorious road from

Orel to Berlin and Prague. Thirty-eight of its men were made Heroes of the Soviet Union and the corps itself was awarded the Orders of the Red Banner, Suvorov and Kutuzov. All told the corps, its brigades and units had 54 military decorations pinned to their banners.

The enemy was hurled back across the Soviet frontiers, and the Red Army helped the peoples of Central and Southeastern Europe to drive the invaders out of their countries. Among the units which took part in liberating Bulgaria, Poland, Czechoslovakia, Hungary, Rumania, Yugoslavia and other countries were communist and people's volunteer divisions consisting of workers of Moscow, Leningrad, Stalingrad, the Donets Basin, Urals Area, Siberia and a number of other major industrial centres and areas.

At the end of April 1945, the Red Army launched an all-out attack on Berlin and many of those who distinguished themselves in these battles and in the storming of the Reichstag were workers. Commanded by S. A. Neustroyev, a former turner at the Berezhovsk Trust in the Urals Area, the 1st Infantry Battalion of the 756 Regiment waged a bitter two-day battle against the German troops in the building of the Reichstag. Men from dozens of Soviet towns and villages signed their names on the walls of the Reichstag where nazism received its death blow.

Beginning of Rehabilitation

During the war, 3,500 large industrial enterprises were built in the country, or two and a half times as many as in the course of the First Five-Year Plan, and more than in the Third Five-Year Plan period which was cut short by the war. Taking into account the number of enterprises restored on the formerly occupied territories the number of large industrial enterprises which became operational during the war totalled 11,000.

It follows, therefore, that when speaking about the Great Patriotic War of the Soviet Union we should mention not only the mass heroism of the Armed Forces, the great scope and excellent organisation of the resistance movement behind enemy line and the selfless effort of the home front, but also the unprecedented scale of construction.

In view of the tremendous destruction and losses caused by the war this was a natural development. About 32,000 in-

dustrial enterprises alone were wrecked on occupied territory and to ensure victory it was necessary not only to make up for these enormous material losses, but to augment the country's military-economic potential in the course of the war itself. Realising this the working class and the entire population displayed still greater determination and enthusiasm than at the height of the industrialisation.

Priority was naturally given to the construction of armaments factories some of which were real giants. One of them was a gunpowder factory which produced 60 per cent more gunpowder from 1941 to 1944 than all the gunpowder factories of tsarist Russia manufactured during the First World War. Another factory which was completed during the war produced 30 per cent more explosives than were produced in the First World War in pre-revolutionary Russia.

Industrial construction, however, was not confined to the building of aircraft, ordnance and other defence industry enterprises. Hundreds of heavy industry enterprises augmenting the economic and consequently the defence potential of the Soviet Union were built in the Urals Area, Siberia, Kazakhstan and Central Asia, with special emphasis on further developing the metallurgical, power and coal industries. Some of the industrial enterprises built during the war now occupy an important place in the economy, among them the iron and steel and tube-rolling factories in Chelyabinsk, the Uzbek and Kazakh metallurgical works and the Amurstal Works in the Far East. Just as important are the Aktyubinsk Ferro-Alloy Works, the Bogoslovsk Aluminium Works and the mining and metallurgical complex in the intensely cold Norilsk. Several heavy engineering factories were built during the war, including the heavy engineering works in Syzran, the Yuzhno-Uralsk Machine-Building Plant, the Urals and Ulyanovsk automobile factories, and the Altai and Vladimir tractor plants. Other industries were also further developed, including specialised engineering (Uzbek Chemical Engineering Works), building (Orsk Building Machinery Factory and the Krasnoyarsk and Kuznetsk cement factories), oil (Kuibyshev Oil Refinery) and the light industry.

New capacities were put in operation at the old industrial enterprises and sometimes this was tantamount to the construction of new giant factories. For example, a blast fur-

nace, the biggest in the USSR and Europe, was built at the Magnitogorsk Works. The construction was conducted under the patronage of the Komsomol, and the young workers gave an excellent account of themselves. More pig iron was smelted in this furnace alone than was produced in the Urals Area prior to the Revolution.

The construction of a large number of heavy industry enterprises, many of which attained their rated capacity after the war, not only manifested the Party's and the nation's confidence in victory, but what was more important, enabled the country to overcome the very difficult task of converting the economy to peaceful rails in the first post-war years.

Yet, despite the enormous scope of construction during the war, the main effort was concentrated on restoring the damage caused by the war.

The retreating enemy turned whole regions into lifeless deserts. Thousands of towns and villages lay in ruins, and heaps of twisted metal and rubble was all that remained of the industrial enterprises and power stations which were built in the course of industrialisation. The Germans demolished 65,000 kilometres of railways and tried to turn the Donets Basin into a "desert zone", to use the term of the nazi leaders.

And so, on August 21, 1943, when fierce battles were still in progress along a 2,000-kilometre front, the Communist Party and the Soviet Government adopted the decision "On Urgent Measures to Restore the Economy in Areas Liberated from German Occupation". Enormous sums of money were found and invested in the rehabilitation of liberated parts of the country and trains with workers, equipment and building materials began to move from the east to the west.

An incredibly strenuous task lay ahead. But those who were to fulfil it were Soviet people who were not only aware of their responsibility but tackled it with a truly revolutionary spirit.

"Comrades, great difficulties are ahead," wrote the Central Committee of the Komsomol in an address to the Komsomol members who arrived to rebuild Stalingrad. "You will see ruins on which you will build giant factories, homes, theatres and schools. There will be days and nights of intense, dedicated labour, the stern life of a soldier-builder.

But however hard things might be, always remember that it was much more difficult for those who just recently stood firm on the ground where you are now working. At first you will have to live in dugouts and tents as they had lived. . . ."

Many who arrived from the east travelled in the opposite direction two years previously. It was a bitter road then. Now they were elated at the prospect of returning home even if it was nothing more than a heap of rubble. Jumping out of the carriages they hugged the wounded, ash-covered earth, their own earth, giving vent to their feelings. They and the people who survived the German occupation worked without respite until everything was restored to its pre-war state.

The majority of Stalingrad factories were either fully or partially restored in less than a year. By the spring of 1945, about 150,000 people had moved from cellars and dugouts into flats with all conveniences. Like the legendary bird phoenix, Stalingrad was rising in youthful splendour from its ashes.

In his time nazi General Stulpnagel reported to Hitler that it would take Russia a quarter of a century to restore what the Germans had destroyed. Perhaps he based his calculations on the fact that it took France ten years to restore the Pas de Calais coal basin which the Germans had wrecked in the First World War. At this rate it would have required not less than 30 years to restore the giant Donets Basin where it was necessary to pump millions of cubic metres of water out of the pits, clear thousands of metres of excavations, build about six million square metres of production premises, etc.

But he was wrong.

The restoration of the Donets Basin was launched in September 1943, four days before the last enemy troops were driven out of it. Coal production was started the same month, although it was only 0.6 per cent of the pre-war level. The coal was obtained from small mines and raised to the surface by hand. There was a shortage of machines, mechanisms and building materials and only ten per cent of the original number of mineworkers.

Here is how driller Hero of Socialist Labour Y. A. Trisichev described that period: "Housewives went from door to

door collecting spades, picks, axes, miner's lamps and even building materials and the children helped carry them to the pit.

"The approaches to Shaft No. 3 were cleared. In the yawning hole lay the paths to the seams. There, somewhere deep down was the coking coal so vital for the production of ammunition, tanks and planes, but the road to it was blocked by water."

Contending with great difficulties the miners continued rehabilitation work, pumping water out of the flooded mines. They knew that it was of the utmost importance to put the Donets Coal Basin in operation again and reports on their progress were regularly published next to Sovinformbureau bulletins in the central newspapers.

"Each metre brought us closer to the first seam called Soleny (Salty—*Ed.*) . . . Perhaps it was so named because of the miners' sweat which first drenched it ages ago. How we wanted to reach it!" Y. A. Trisichev wrote. "Bruising our hands we removed rocks and wringing the water out of jackets gradually forced our way to the seam. During short snatches of sleep we saw it glittering in the rays of the miner's lamp."

"At last we reached Soleny. . . . On February 15, the first 20 wagon loads of coal were raised to the surface. It was a moment of indescribable jubilation. The news spread like wildfire throughout the town. Mothers with children, grandparents with their grandchildren rushed to the mine. It was the first coal, the first victory."

Seven hundred million cubic metres of water were pumped out of the flooded mines in the Donets Basin. That amount of water could have filled a lake 140 square kilometres in area and five metres in depth.

As more and more mines were restored in the Donets Basin, the more acute became the shortage of personnel. And then veteran workers and women came to the assistance of the miners. Following the example of Grigori Sidorchenko, a former hewer at Kochegarka mine, veteran miners, including those whom the invaders could neither persuade nor force to work for them returned to their pits.

The mine workers of the Kuznetsk Basin, the Urals Area, Karaganda, Vorkuta and Moscow Region organised *voskres-*

niks and economised funds and materials and with the money thus earned and saved they purchased equipment, tools and machines for the Donets Basin.

Within two years over 100 of the main medium and small mines were put in operation in the Donets Basin. It was a major achievement which was of crucial importance for the rehabilitation of the metallurgical, engineering, building, power and other key industries. The rate of rehabilitation of the local iron and steel industry depended on the amount of coal produced in the Donets Basin.

Things were just as difficult for the metallurgists. Displaying extraordinary inventiveness they repaired the damage wrought by the invaders. The engineers and workers did not shun justifiable risks in restoring the most intricate units and machinery. For instance, they exercised tremendous ingenuity in restoring Blast Furnace No. 1 at the Azovstal Works in Mariupol. The invaders blew up its buckstays causing it to subside three and a half metres and to lean. The question was whether it would be more practicable to demolish it completely and build a new one or to try to repair it. The workers decided to repair it. Using giant hydraulic jacks they raised the huge furnace weighing over 1,200 tons, levelled it and then made it fully operational. This was a unique technical achievement.

This method of repairing production facilities seriously damaged by the Germans was successfully employed during the rehabilitation of the engineering industry, too. It saved a lot of time, labour and material outlays.

The inventiveness of the builders and metallurgists and the introduction of their rationalisation proposals cut expenses by millions of rubles and increased the pace of restoration work.

Here are two extremely impressive facts. It took the Germans 629 days to produce the first steel at the Dneprodzerzhinsk Iron and Steel Works. But it was of low grade. When the city was liberated it took the iron and steel workers only 26 days to resume the production of high-grade steel.

Iron and steel giants were restored in record time. No difficulties were too great for the Soviet people as could be judged by the timetable of the restoration of the Ma-

keyevka Iron and Steel Works, the biggest in the south of the country:

"September 7, 1943. On the second day after the Germans were driven out of Makeyevka, the veteran workers began to restore the works.

"October 4. The first turbine started generating power for the works, the town and the neighbouring industrial enterprises.

"October 7. Open-hearth Furnace No. 2 commissioned.

"October 13. Open-hearth Furnace No. 3 commissioned.

"November 1. Open-hearth Furnace No. 4 commissioned.

"December 27. Open-hearth Furnace No. 5 commissioned.

Within three months the iron and steel workers of liberated Makeyevka produced 15 times as much metal as the Germans were able to produce in the more than two years of their occupation of the town.

"February 7, 1944. A powerful 2,000 kilowatt turbogenerator was put in operation.

"February 9. Thin sheet rolling mill No. 3 commissioned.

"March 17. Casting machine fully repaired.

"March 28. The fireproof walling of Blast Furnace No. 2 completed.

"April 11. Repaired Furnace No. 6 commissioned.

"May 3. Rolling mill '280' commissioned.

"May 16. Rolling mill '330' commissioned.

"May 27. Agglomeration machine No. 4 commissioned.

"May 31. Rolling mill '600' commissioned.

"July 7. The first steel was smelted in a 100-ton Open-hearth Furnace No. 7.

"July 21. 02:05 hours. Blast Furnace No. 2. blown in."

In 1945, restoration work was started on a superpowerful blooming mill at the works.

The same year the iron and steel factories in the Donets Basin and the south of the country, and the industrial enterprises in the Crimea and the Northern Caucasus produced 1.6 million tons of pig iron, over a million tons of rolled metal and 3.1 million tons of coke.

Freight trains loaded with crates of all shapes and sizes sped to Zaporozhye. The addresses of the consigners gave a fairly good idea of the economic geography of the 15 republics making up the Soviet Union. One hundred and twelve

goods carriages arrived on just one day bringing machine tools and steel sections from Magnitogorsk, motor vehicles from Moscow, prefabricated houses from Petrozavodsk, mica from the Urals, and so on and so forth. Powerful modern machinery replaced the obsolete earthmoving and building equipment which was used here 15 years ago. The new machinery was the contribution of many thousands of workers to the rehabilitation of Zaporozhye. And once again the Dnieper Hydroelectric Power Station became a nation-wide construction site. Many of the workers who built the first Dnieper project now helped to remove mountains of wrecked concrete and metal and erect a temporary dam on the river.

It was at that time that 50-year-old Semyon Alyoshin joined one of the building teams. Shortly, he was appointed head of a team of concrete layers and a few weeks later his name became known to the whole country. Hundreds of concrete layers adopted his methods of work and experience.

Everyday work became an act of heroism and heroism became a matter of everyday life, something which foreign specialists and economists could have neither foreseen nor taken into account. And it was not in 25 years but in two years after the victory over Hitler Germany that the Lenin Dnieper Hydroelectric Power Station started generating power current.

The transport system was being rehabilitated at an increasing pace. Speaking of the tremendous work performed by the Soviet railwaymen, Head of the Chief Administration of Military Restoration Work of the People's Commissariat for Railways General P. A. Kabanov said at a meeting in June 1945: "If someone told me in peacetime that in a mere 30 months it would be necessary to restore 200,000 metres of bridges I would have replied: 'It is either madness or I understand nothing in building work...'"

Fulfilling several quotas in a shift, restoring demolished enterprises and clearing the streets of debris and rubble, a job which was carried out voluntarily and without remuneration, the Soviet working class always bore in mind that it was the elder brother and friend of the collective farm peasantry.

Patronage over the farms in the liberated parts of the country became a country-wide movement at the initiative

of the working people of Ivanovo Region. Industrial and office workers rendered practical assistance to the rural population in the formerly occupied territories.

The Azerbaijan SSR and Chkalov Region helped to restore agriculture in Stavropol Area and in the Terek Valley, and the working people of Kuibyshev Region and Kazakhstan came to the assistance of the people of Smolensk and Orel regions.

Substantial help to the rural areas was also furnished by the workers in the liberated towns who supplied the villages with materials, implements, machinery and helped to take in the harvest and build houses.

By the end of the war, 1,500 state farms, approximately 3,000 machine-and-tractor stations and 85,000 collective farms were rehabilitated in the liberated areas.

On their part the collective farm peasants who were themselves short of foodstuffs managed to help the workers with food and labour power. This was magnificent demonstration of socialist mutual assistance and the high level of consciousness of the two friendly classes of the Soviet society. Towns and villages with thousands of houses, factories, mines, schools and hospitals began to appear in the liberated parts of the country.

By the end of the war the working class restored about 30 per cent of the wrecked basic assets in industry alone.

Mobilising the working class for the rehabilitation of industry in the liberated areas, the Communist Party and the Soviet Government did everything within their power to increase the country's economic potential.

All this was the beginning of the work of erasing the aftermath of the enemy invasion, work which was unparalleled both in scope, difficulty and pace.

* * *

The war disclosed the colossal, inexhaustible might of the socialist Soviet Union, of its working class and the entire population which under the guidance of the Communist Party rose to a man to safeguard its revolutionary gains, to uphold the freedom and independence of their socialist homeland. G. M. Krzhizhanovsky, Lenin's associate and a promi-

ment member of the Communist Party and the Soviet Government, wrote in 1945:

"... Today fresh shoots of revived life are again sprouting where yesterday there was to have been a permanent desert zone according to the vicious designs of the enemy.

"The values of the old outgoing world are crumbling before our eyes and an incipient new world is clearly emerging in the raging conflagration of this war.

"The road to the elimination of the sources of this world-wide ordeal is being paved with incalculable sufferings. And the whole world sees that our homeland is standing at the head of this great liberation movement.

"And how justified Lenin would have been in telling all of us, with a merry twinkle in the piercing depth of his keen eyes: 'Well, comrades, wasn't I right in placing my basic and principal stake on the gigantic forces of our wonderful popular masses: we will hold out, endure, break down all obstacles, win.'"

SOCIALISM'S VICTORIOUS MARCH (1946-1958)

Striking Changes Victory! The whole country waited for Radio Moscow to broadcast that long-awaited word.

The Kremlin's ruby stars began to shine again. They were carefully camouflaged when the capital was beating off the enemy's frenzied attacks. But even then their symbolic light penetrated the hearts of millions of people both on the frontlines and on the home front. Now, on the eve of May Day, Mikhail Topolin, a Kremlin electrical engineer, and two steeplejacks, Mitrofan Matyushkin and Vassily Tolchin, had the honour of relighting them.

On May 9, 1945, the Soviet Union marked its great victory over Nazi Germany and shortly afterward demobilisation from the Soviet Army was started.

The victorious troops were given a tremendous welcome in Leningrad. A Guards corps with many Leningrad workers in its ranks marched into the city in three columns through the outposts in the suburbs. Here, at these outposts, which were checkpoints during the blockade, the people built triumphal arcs in honour of the troops. Bearing their factory banners with Government decorations pinned to them the workers of the Kirov, Elektrosila and other industrial enterprises streamed to welcome the troops carrying Guards banners. The scene was filled with a profound meaning: it was a meeting of two armies, one had fought on the field of battle and the other forged victory on the home front.

According to tradition, the Leningraders met their fellow-

townsfolk with bread and salt. Addressing the troops at one of the meetings in the city, veteran worker Chiryeu said: "On behalf of the people of the Vyborg District I want to express to you, dear friends, our deep affection and gratitude. We are the sons of one land, one great country. We, workers, toiled hard and did a good job because we had every confidence in you."

The first of the demobilised officers and men arrived in Moscow on July 17 where they were welcomed by representatives from the capital's industrial enterprises and various institutions. There was a meeting at which Guards Sergeant N. I. Shabalin said: "In the grim days when the enemy was approaching Moscow, its inhabitants rose to a man to defend the heart and the capital of the country. Like other Soviet people, I, a fitter at a Moscow factory, gave up my peaceful occupation to become a soldier, a gunner. With my fellow-Muscovites I took part in many battles. We defended Moscow and drove the enemy back to the west. . . . Now we have returned with victory to Moscow which we all love, to our homes and families. We shall return to our benches and work just as hard as we had fought for our country. So say all my comrades, yesterday's frontline soldiers, today's peaceful citizens of Moscow."

In all cities, townships, railway stations and villages a solemn and joyous welcome awaited the Soviet troops who defeated a strong and vicious enemy.

In the summer months of 1945, trains also thundered from the west to the east, transporting troops and military equipment as the Soviet Union and its Armed Forces fulfilling their commitments to the Allies were preparing for a war against militarist Japan.

Once again, as during the war against nazi Germany, the home-front workers supplied the Army with everything it needed for military operations in the Far East.

Japan capitulated in less than a month. On September 2, 1945, the Great Patriotic War of the Soviet Union and the Second World War came to an end.

On September 13, 1945, the *Pravda* published a report of the Extraordinary State Committee for the Ascertainment and Investigation of the Atrocities Committed by the German Fascist Invaders. It disclosed that they had either completely

or partially destroyed 1,710 towns, more than 70,000 villages, about 32,000 industrial enterprises and 65,000 kilometres of railways and plundered tens of thousands of collective and state farms and machine-and-tractor stations. As a result of the war damage industrial production declined: the output of cement fell to the level of the late twenties, the production of oil, tractors and pig iron was not higher than in the period from 1930 to 1933 and the output of coal, steel and ferrous metals dropped to the level of the mid-thirties. In general, the war retarded the development of the Soviet Union for at least a decade.

The aftermath of the war was omnipresent. There was a shortage of food and consumer goods and they had to be rationed. Hundreds of thousands of people returned to their home towns only to find their homes wrecked and they had to live in dugouts. There was also a serious shortage of housing in the eastern regions of the country where a large number of workers lived in temporary barracks and crowded hostels.

There were not enough schools, hospitals, kindergartens and nurseries. Municipal transport was partially disorganised and in the liberated areas it had to be built up from scratch. Labour conscription remained in force during the first post-war months. The working day was from ten to twelve hours long and manual labour was widespread.

But it were losses in human life that were the most terrible. In 1945, the Soviet Union had a population of 170 million, or over 20 million less than in January 1940. It was only in 1955 that the population figure for the whole of the USSR reached the pre-war level (in the Ukraine, Byelorussia and a number of other regions it took a longer time). Even in 1959, the population of Leningrad, Novorossiisk, Kremenchug, Smolensk, Kerch and other large industrial centres was smaller than in 1939. The number of industrial and other workers declined by more than five million and totalled 28.6 million in 1945. On an average the Soviet industry lost one out of every seven workers.

The situation was the most difficult in the areas which were under temporary occupation. In Latvia, for example, the number of industrial workers dropped by over 25 per

cent, in Estonia by 28.6 per cent and in Lithuania by approximately 33 per cent.

Besides, there was a considerable decrease in the number of experienced industrial workers. There was even a large number of women and juveniles working in the coal mines. Yesterday's housewives and schoolchildren rapidly mastered the job of turning out mass quantities of standard articles, whose production did not require skilled labour. In 1945, women made up more than 50 per cent of the industrial workers, 33 per cent of the building workers and 40 per cent of the transport workers. The share of young workers under 18 was unprecedentedly high. Young people and elderly workers (over 60) constituted 20 per cent of the workers of the heavy engineering industry, one of the most labour-intensive and highly skilled branches of production.

To return to peaceful production it was necessary to replace the outdated equipment, worn out parts and units which had long been in need of repairs. It was not only a question of raising production to its pre-war level but also of utilising the accumulated experience and introducing the latest achievements in science and technology. The range of commodities scheduled for production expanded steadily. A number of aircraft factories were instructed to organise the manufacture of domestic refrigerators, washing machines and radio and television sets. Former tank builders, who during the war turned out seven or eight basic types of articles, now, in 1946, had to master the serial production of 40 basic types of commodities, including locomotives, railway carriages and other transport facilities. The range of items manufactured by farm machinery factories increased severalfold.

Thousands of enterprises began turning out other types of commodities. The mass line production gradually gave way to serial production and often to the fulfilment of individual orders.

The problem of industrial cadres became extremely acute, for the general course of rehabilitation and the further development of the national economy depended on its successful solution.

It would be opportune to recall how the country's industry was revived at the beginning of the twenties. In those years

it was necessary to overcome the consequences of the declassing of the working class and unemployment and to permit the establishment of private enterprises and the activity of the nepmen. New labour discipline was being established and the prerequisites for mass emulation in industry were only beginning to take shape. The main difficulties of the period were shouldered by the factory workers in the old industrial areas.

The post-war rehabilitation in the forties followed a totally different pattern. Now the advantages of the socialist system of the economy made themselves felt to the full. Despite the terrible consequences of the Nazi aggression the working class was never more solid; its labour resources were distributed in keeping with a state plan; work for hire for private individuals and unemployment were past history; all factories without exception, industries and towns were participating in the socialist emulation movement. National contingents of the working class appeared in the republics of the Soviet East and in all the formerly backward parts of the country. In 1945, the Uzbek SSR had 200,000 industrial workers, and Kazakhstan over 250,000. In Turkmenia, Kirghizia, the Buryat Autonomous Republic there were many more workers than prior to the war and dozens of times more than in the twenties. Industrial centres which did not exist some 20 years ago were contributing to the general economic upsurge. The workers of Magnitogorsk, Komsomolsk-on-Amur, Frunze, Karaganda, Begovat, Rustavi, Sumgait and Ulan-Ude selflessly helped the workers of the Ukraine, Byelorussia, the Baltic republics and the Russian Federation to rehabilitate their industries.

In March 1946, the USSR Supreme Soviet passed the law on the Fourth Five-Year Economic Development Plan for 1946-50. By the end of the five-year period, the country was not only to have healed its war wounds but surpass the 1940 level of industrial production by 48 per cent. More funds were invested in capital construction than in all the pre-war five-year plan periods. The scope and scale of building work was unprecedented even for the Soviet Union. As a result the shortage of labour power and highly skilled personnel made itself felt with particular force.

The return of the demobilised Soviet Army men had an

immediate impact on industry. And though by no means all of them were highly skilled and experienced workers (many had to be retrained) their arrival at the factories and other industrial enterprises strengthened labour discipline and stimulated emulation. There was a large number of Communists and Komsomol members among them.

Nonetheless, demobilisation did not fully compensate the shortage of manpower. Additional measures had to be introduced. Just then Komsomol member G. Sergienko, a time-keeper at the Kolomna Locomotive Works came forward with a splendid initiative. Seeing that equipment was standing idle and that the "Help Wanted" sign outside the factory was never taken off, she asked to be transferred to one of the production shops. This was in September 1946. A month later the *Pravda* reported that increasing numbers of office workers were following suit in what had become a rapidly growing movement.

To draw a still greater number of workers into industry, especially into such key branches as the fuel and metallurgical, the Government decided to raise the wages of the workers and office employees directly connected with the production of coal, oil, pig iron, steel and rolled metal. As of September 1, 1946, wages were raised by 20 per cent in the Urals Area, Siberia and the Far East where people worked in particularly severe climatic conditions. Considerable privileges were granted to miners and chemical workers, and the payment of long-service bonuses made the workers interested in remaining at their enterprises and curtailed labour turnover.

Other measures designed to improve labour conditions included the abolition of compulsory overtime, introduction of annual holidays and the establishment of an eight-hour working day. At the beginning of 1947, the factory management and factory trade union committees resumed the practice of concluding collective agreements. This measure was also intended to raise the productivity of labour as quickly as possible and simultaneously improve the workers' material and living conditions. It was envisaged that the training of new workers and the improvement of their skills would be one of the key points of the agreement.

That year the USSR Council of Ministers passed a deci-

sion concerning the procedure of conducting an organised recruitment of workers. Many special offices which were set up in all republics and regions concluded labour agreements for a period of not less than a year and guaranteed the workers travelling expenses and jobs. In addition to the then existing norms of supply the ministries sold the workers who had signed the agreements "one overcoat, one suit, a pair of shoes, two sets of underwear and ten metres of fabric and another five metres of fabric for each member of their families who moved with them; as regards the workers who moved to the Urals Area, Siberia and the Far East they and the members of their families were entitled to 15 and 7 metres of fabrics respectively..." These lines from the Government decision indicate how difficult it was to solve the problem of labour power in the first post-war years.

From 1946 to 1950, thanks to the organised labour recruitment system about four million workers came to work in industry, transport and building. Approximately 3.4 million people became industrial workers after completing a course of study at state labour reserves schools.

Those who came to work in industry, building and transport for the first time, and most of them were former collective farmers, required training. Even those who had finished vocational and factory apprenticeship schools lacked the necessary skill as a rule. They had to be trained and taught advanced labour methods. Once again it were the veteran workers who shouldered the main burden of this task. The appeal "Let each Stakhanovite have his own pupil" was approved by the front-rank workers. As a result, eight million workers of various professions were trained directly at the industrial enterprises during the five-year period.

By the end of the forties, the working class surpassed its pre-war numerical size, and the share of women and juveniles employed at industrial enterprises declined as compared with 1945.

The fifties were marked by a rapid growth of industry. The radio, press and television daily reported the commissioning of new power stations, mines, factories, oil fields, the attainment of the rated capacities by industrial enterprises and the reconstruction of the old factories. The working class was undergoing both quantitative and qualitative changes.

In 1958, there were 54.6 million industrial and office workers in all branches of the economy. Of them 19.6 million were employed in industry, 4.4 million in the building industry and 5.6 million in the transport system. There was a particularly rapid growth in the number of workers in the eastern regions with their 75 per cent of the country's total coal reserves, up to 80 per cent of the hydropower resources, the biggest iron-ore deposits and a large number of other natural resources. In 1958, the number of industrial and office workers in the country as a whole exceeded the 1940 figure by 71.1 per cent, in Kazakhstan by 182 per cent, in Western Siberia by 133.3 per cent and in Eastern Siberia by 113 per cent. For example, the share of the workers of Kazakhstan in the Soviet working class as a whole increased from 2.9 per cent in 1940 to 4.7 per cent in 1958, of Western Siberia from 4.1 per cent to 5.5 per cent, of the Urals Area from 8.4 per cent to 10.2 per cent, and so forth. In Uzbekistan this figure reached 2.5 per cent, in Eastern Siberia 3.8 per cent and in the Far East 2.7 per cent.

The country gradually healed its war wounds. The composition of the working class became more stable as the labour turnover, which assumed very large proportions following the repeal of wartime laws and the start of the re-evacuation, declined. Censuses conducted in 1953 and 1957 showed that the strata of workers with an uninterrupted service record ranging from five to ten years and over rapidly increased in all branches of production with the exception of coal mining. From 1953 to 1957, the proportion of these groups in industry as a whole rose from 32 to 40 per cent.

The proportion of women in industry dropped to 45-47 per cent and did not change throughout the fifties. As regards the share of young workers under 18, it decreased even more perceptibly, and in 1957 was not more than 1.5 per cent in the heavy engineering industry.

The working class was also passing through a period of "rejuvenation". To a considerable extent this was due to the inflow of demobilised servicemen and the retirement on pension of a large number of elderly people who resumed work during the war. By 1958, over 82 per cent of the industrial workers were not older than 45 and only 3.5 per cent were over 55. This meant that people who were at the height of

physical and mental powers and possessed adequate skill and production experience made up the nucleus of the working class.

Another development was that the rural areas ceased to be the main source of replenishments for the working class. There were two reasons for this. First, the urban population was growing rapidly, and second, the living and working conditions of the collective farmers were beginning to improve, especially between 1953 and 1958, when agriculture made considerable headway following the September (1953) Plenary Meeting of the Central Committee of the CPSU. The inflow of labour power from the countryside sharply declined.

Now it were young people, including secondary school graduates, who were the principal source of replenishment of the working class. In 1954, technical schools were set up within the system of state labour reserves for the purpose of drawing young people into production. From 1955 to 1958 alone, about 300,000 workers with a secondary education who also had completed a course of study at technical schools got jobs in industry, building and transport.

A still greater number of boys and girls went to work at industrial enterprises directly after school.

However rapid the rate of growth of the working class it fell short of the country's requirements in labour power. The situation was most difficult in the developing areas where everything had to be done from scratch, from the laying of foundations, erection of production premises and the commissioning of industrial enterprises; at the same time it was necessary to build housing, schools, kindergartens and public facilities and services. That was how Angarsk, Rudny, Ishimbai, Bratsk and dozens of other towns, now important industrial centres, appeared on the map of the Soviet Union. Each of them has its Komsomol street or Komsomol avenue, or blast furnaces, mines, etc., named after the Komsomol, for they were built by young people, those thousands of youths and girls who came there with the assignments of regional and city Komsomol committees in their pockets and in response to the urge of their hearts.

The older generation has not forgotten how young people in response to the Party's appeal left their homes for shock-

work construction sites during the first five-year plan periods when the country was putting through its industrialisation programme. The appeal resounded with fresh force in the mid-fifties, and a large army of enthusiasts went to the east to build new towns there. From 1956 to 1958 alone, about 600,000 Komsomol members from all parts of the country took part in the construction of key projects in Siberia, the Urals Area, the Far North and Kazakhstan.

The fraternal ties between the national contingents of the working class became still stronger.

A tube mill was built in Sumgait in the Fifth Five-Year Plan period. But before it went in operation the young metallurgists of Azerbaijan were instructed in advanced work methods by the workers of the tube works in the Ukrainian town of Nikopol.

At the time some engineering factories in the Ukraine and the Urals Area took part in building a unique unit for the Transcaucasian Iron and Steel Works in the young Georgian town of Rustavi.

The workers of the Baltic republics joined as equal members the friendly family of the multinational working class of the Soviet Union.

The working class of Latvia, where only recently, prior to her accession to the Soviet Union, there were many unemployed, now developed together with the other national contingents of the Soviet working class and contributed its share to the common cause of building communist society. The same applied to the workers of Lithuania, Estonia and all the regions and areas which were reunited with the USSR. Lvov became an industrial centre. The products of Moldavian factories won fame in all parts of the country.

The professional composition of the working class also changed. Certain types of unskilled arduous labour became obsolete and a large number of professions requiring expert knowledge of machines and mechanisms appeared. This led to a sharp rise in the number of skilled machine attendants and a considerable decline in the number of manual workers.

The development of machines wrought drastic changes in such a labour-intensive branch of production as timber-felling. Even on the eve of the Great Patriotic War the timber-

men, like their grandfathers felled trees mainly with saws and axes and used horses for hauling. At the end of the forties and the beginning of the fifties, the first lorries, tractors, pulleys, electric saws and mobile power stations appeared in the forests. In 1940, timber was felled by hand while in 1950, this process was already 38 per cent mechanised. In 1958, the level of mechanisation rose to 94.7 per cent. People with obsolete occupations learned to drive lorries and tractors and to use electric saws and other equipment. The timber-felling industry became an industrialised branch of production.

The same happened in the building industry where the principal tools had been the spade, trowel and not very powerful cranes. With the development of new building machines such as bulldozers, excavators, a wide range of cranes, prefabricated concrete units and standard sections, the building workers had to be trained in new professions, the most important of which were those of lorry drivers, steeplejacks, electricians and mechanics.

The higher rose the level of mechanisation and automation of production the greater became the demand for highly skilled workers. It was now important to concentrate more attention on the training of industrial personnel, on raising their level of technical knowledge and general education.

From 1951 to 1958, over 23,000,000 skilled workers were trained for work in industry, building and transport. Most of them were trained directly at their places of work and also in labour reserves and factory apprenticeship schools. In the same period about 35,000,000 workers raised their professional skill. This made the bulk of the Soviet workers highly skilled. Thanks to extensive general and specialised training very many of them acquired two and even more professions and broadened their technical know-how.

On the eve of the war, only 20 per cent of the workers had a seven-year or secondary education. At the beginning of the Fifth Five-Year Plan period 72 per cent of the workers still did not even have a seven-year schooling. But by the end of 1958, 38.6 per cent of the workers had incomplete secondary, secondary or higher education. Millions of people engaged in production were enrolled at correspondence

and evening departments, at diverse courses run by industrial enterprises and in special schools.

This was one of the principal reasons of the gradual approximation of the labour of a worker with that of a technician and engineer and of the emergence of a large and constantly growing number of innovators. The names of V. A. Kolesov, P. B. Bykov, V. V. Yermilov, V. K. Seminsky, A. Y. Karasev and many other front-rankers became widely known in the country and their methods of work were studied in engineering and scientific circles. They were not simply enthusiasts but people with probing minds, great experience and profound knowledge of researchers. Their daily work yielded conclusions and formulas which were quoted in manuals, lectures and scientific papers and subsequently became the basis for inventions.

No one was surprised when front-rank workers performed the functions of engineers and technicians, or when an engineer performed the job of a highly skilled worker. On the one hand, the reason for this lay in the general development of technology, in the growing scientific and technological revolution, and, on the other, in the improved skill of the workers, in their high cultural and technical level.

Some of those who initiated the Stakhanov movement in the mid-thirties had only a primary education. At a meeting in the Kremlin in 1935, the famous smith at the Gorky Automobile Factory A. Busygin said: "I am almost illiterate. . . . My greatest desire is to study. I am a smith but I also want to know how the power press is made and to learn how to make it."

At the end of the forties he was put in charge of the very shop where he achieved several world records. The hopes of many other initiators of the Stakhanov movement also came true: the weaver M. Vinogradova completed the Industrial Academy and was made Assistant Director of the Frunze Factory. V. Bogdanov became an engineer and chief of the Moscow-Kiev Railway. Administrative posts were given to the miner A. Stakhanov, engine driver P. Krivonos and others.

Their direct continuers, the innovators of the forties, P. Bykov in Moscow, G. Bortkevich in Leningrad, G. Nezhevenko in Odessa acquired fame in different conditions. All

of them had a complete secondary or specialised education. A Sverdlovsk turner V. Ponomarev was over 30 when he entered a technical school. Upon graduation he wrote a number of articles and brochures and often lectured to students, economic executives, teachers and scientists. Referring to his labour achievements he said: "In our day and age it is impossible to attain high labour productivity with nothing more than bare hands and physical effort. Today we have considerable technical means at our disposal and unlimited opportunities for engaging in creative work. Not physical effort, but the ability to master the equipment to make the most of it, that is what enables us to reach a record level of labour productivity."

At the 1957 Moscow Youth and Student Festival, a young Norwegian asked Vitaly Sokolov, a blooming-mill operator at the Serp i Molot Works:

"What are you?"

"A worker."

"But I've heard that you're a student."

"That's right. I'm a student."

"What are you then, a worker or a student?"

Sokolov explained that he was a rolling-mill operator and a college student at the same time. What surprised a citizen of a capitalist state was long since a part of everyday life in the Soviet Union.

In 1958, about two million people, three times as many as in 1945, enrolled in evening schools which they attended after working hours. Approximately a million students, or five times more than in 1945, were enrolled in evening and correspondence colleges. In this period the number of people attending evening and correspondence technical schools increased sixfold.

Outlays on the building of schools and the retraining of industrial personnel was high on the list of factory expenditures even during the rehabilitation period.

In 1950, on the initiative of its Party organisation and the administration, the Kupavna fine cloth factory for the first time introduced a three-year plan for raising the general educational level of the workers. The idea was prompted by life itself. In those days the factory was set the task sharply to accelerate the output of fabrics and began to

receive more intricate and efficient equipment. But it was not easy to master it in view of the post-war changes in the composition of the workers. Over 700 young women workers had been taken on, almost a thousand people did not even have a seven-year education and many assistant foremen lacked the necessary experience.

Taking all these factors into account the factory personnel arrived at the conclusion that in order to develop production it was of primary importance to raise their cultural and technical level. Accordingly, the production collective designed a long-term plan for raising the general educational level and the qualification of all workers. In order to carry it into life it was necessary to reorganise the shifts, expand the system of courses and enlarge the school for industrial workers and the technical school. Shop superintendents, trade union and Komsomol organisers and assistant foremen drew up attendance and progress reports, which were taken into account when the results of the socialist competition were summed up. The plan and its realisation yielded excellent results and eventually became a fine tradition.

The Kupavna workers were not the first to combine their undertaking to overfulfil the plan with the decision to raise their general educational and technical level. The first shock-workers were anxious to abolish illiteracy and master difficult professions, and in the Second Five-Year Plan period thousands of workers took examinations in the required minimum of technical knowledge. Nonetheless, production indices remained the principal criteria of shock-workers and Stakhanovites. The Kupavna workers were the first to achieve this goal by attaching equal importance to raising their cultural and technical standards and carrying out their production commitments.

The production training programme was modified throughout the country also in 1950. Previously the passing of the examinations in the required minimum technical knowledge was the principal form of raising a worker's skill. Now, the industrial workers had passed this stage. In 1950, minimum technical knowledge training was included into a general programme of preparing new workers and ever since it is being implemented in the form of individual and

group apprenticeship at various courses, special and vocational schools, etc.

Technical progress was directly instrumental in increasing the percentage of highly skilled workers. In 1939, a quarter of the workers at the Uralmash Works had the 3rd grade; in 1951, they comprised only eight per cent and the percentage of workers with the 6th grade rose from eight to 30.

In the automobile industry the introduction of new methods of labour raised the average grade of the workers from 3 to 4.2. Still greater changes took place in the building industry where in 1949 the average grade of the mason rose to 4.7, that of the carpenter to 5.2 and that of the electrician to 5.6.

From 1946 to 1958, the working class grew in number and underwent important changes in its composition: the share of industrial workers and the working class as a whole, in the total population of the USSR increased. While on the eve of the Second World War, the workers comprised less than 20 per cent of the population, in 1958, they totalled approximately 33 per cent. But even before that the workers with their families made up the majority of the population and resulting changes in the Soviet social structure reflected the general process of the transformation of the dictatorship of the proletariat into state of the whole people.

The Epic of Rehabilitation

On March 18, 1946, the Supreme Soviet of the USSR passed the law on the Fourth Five-Year Economic Development Plan. The highest organ of Soviet power called upon the people to promote socialist competition.

In response hundreds of workers' collectives promptly pledged to raise production to a still higher level. In May 1946, the metallurgists of the Kirov Plant in Makeyevka issued the following appeal:

"Comrade metallurgists! The fulfilment of the five-year plan of economic rehabilitation and development of the USSR depends largely on us. Metal is needed to produce industrial equipment and agricultural machines, rehabilitate the transport and provide the Soviet Army with modern weapons. . . . We propose an all-Union socialist emulation aimed at fulfilling and overfulfilling the economic rehabilitation and development plan."

This appeal was supported by workers in all branches of industry, including the miners of the Donets Basin and the Moscow textile workers, who summoned their counterparts throughout the country to join the all-Union socialist emulation.

"The fact that miners and textile workers are simultaneously appealing to get the socialist emulation under way," the *Pravda* wrote then, "shows that all the contingents of the great army of people making up the Soviet working class will do their utmost to fulfil the five-year plan, to expand the production of the means of production and consumer goods."

Newspapers which just a short while ago devoted their pages to frontline reports and photographs of servicemen, now regularly informed their readers about progress in rehabilitation work and the growth of peaceful production. Each day they published the names of new heroes of labour.

When the war ended G. I. Zaporozhets was with the Soviet Army in Berlin. He returned to the Donets Basin in time to take part in the restoration of Pit No. 7 of the Snezhnyanantsit Trust. One day the miners discovered signs of flooding deep in the mine. Suddenly torrents of water burst from the upper galleries and rushed down the shafts threatening to flood the mine completely. The men worked for forty hours curbing the flow of water, repairing and installing the pumps and hand-hauling five-ton mechanisms. The catastrophe was averted.

Apart from producing coal, the miners also helped to rehabilitate the pit. Zaporozhets quickly mastered the coal-cutting machine and considerably increased its efficiency. He performed the work of three miners in the full sense of the word and in two years fulfilled six annual plans.

But there was a shortage of experienced miners directly engaged in producing coal, for many of them were occupied with pumping the water out of the pits and repairing equipment. As regards the newcomers, they were unable quickly to master the difficult production methods. There was also a shortage of mining equipment. At first, as the five-year plan got under way, mine electric locomotives, loaders and powerful ventilators were delivered in small batches. In 1945, there were only seven modern coal com-

bines in the whole of the Donets Basin. In 1950, there were 688 but still vast quantities of coal were cut with the help of heavy pneumatic hammers.

The Government lowered the pre-war production quotas. Time, additional efforts and funds were needed before the miners would be able to attain and then surpass the previous level of labour productivity. The shortage of skilled workers, insufficient knowledge and absence of work habits were offset by round-the-clock work and the employment of a greater number of workers. All the more important in these circumstances was the experience of the innovators and the spread of advanced work methods. As an incentive to the front-rankers the USSR Supreme Soviet instituted the medal "For the Rehabilitation of the Donets Basin Coal Mines"; the USSR Council of Ministers established the title "Merited Miner" and the last Sunday in August was designated as Miner's Day which has been observed each year ever since.

At the end of 1949, the country rejoiced at the news that the Donets Basin, the country's principal coal-producing area, surpassed its pre-war level of output.

In the spring of 1946, there was news of a new record in steel smelting. Communist M. Y. Kucherin, a friend of Makar Mazai, smelted 76.5 tons of steel in seven hours and fifty-five minutes, cutting three hours off the normal time. This was his first contribution to the Fourth Five-Year Plan.

For a period, Kucherin's methods became a school for innovators as scores of front-rank workers considered it a matter of honour to follow his example.

Meanwhile, an old dream was materialised at the Serp i Molot Works in Moscow, where a relay of workers headed by I. Turtanov mastered the methods of rolling 480 ingots in eight hours, one per minute.

The iron and steel workers of the eastern parts of the country attained the most outstanding results. The entire growth in the production of ferrous metals at the Kuznetsk Works and at the metallurgical enterprises in Western and Eastern Siberia and in the Far East between 1946 and 1950 was achieved through the more efficient use of the operating capacities. In those years no new projects were put in

operation there. The workers of the Kuznetsk Works were in the lead, and though they had to switch to using the local ores which were of a lower grade than the Magnitogorsk ores, they attained the highest results. In particular, they surpassed all steel output records thanks to their excellent training and skill and constantly growing effectivity of production.

In 1949, more pig iron and steel was produced in the USSR than in the last pre-war year.

A no less momentous occasion was the commissioning of the Dnieper Hydroelectric Power Station. It was restored thanks to the inspired labour of a large group of enthusiasts who had participated in its construction in the period of the First Five-Year Plan. Workers who came from other parts of the country also gave an excellent account of themselves.

The first turbine was put in operation on March 4, 1947. On June 12, 1950, the station became fully operative and its capacity was much higher than before the war.

In the Ukraine and in all other areas and towns, the rehabilitated factories, pits, power stations and oil fields acquired a modern appearance, as new production premises were built, the old equipment dismantled and production lines installed. The enterprises were outfitted with highly efficient machinery and apparatuses possessing higher speeds and greater capacities, with automatic devices, and so forth. Rolling mills of post-war design were twice as fast as the old ones. The capacity of metal-cutting machine tools increased from five to seven times, that of coal-cutting machines by two times and automobile engines by 1.5 times. The automobile industry began producing Moskvich and Pobeda cars, heavy-duty tip-up lorries and lorries with trailers.

Turbodrills were made available to the oil workers who also received mobile automatic and semi-automatic units mounted on lorry frames and outfitted with collapsable metal derricks. This equipment sped up prospecting and lowered its cost since it was no longer necessary to build high derricks and bring in heavy equipment each time a test well had to be bored.

There were bulldozers, scrapers, cranes, dredgers and the first walking excavators at all the major projects.

All this was indicative of the mass technical re-equipment of industry, of the increased know-how of those who manufactured the new equipment and who were rapidly mastering the production of a large variety of new items. The most important role was played by the metalworkers who as before were the biggest contingent of the working class. The operation of the mechanisms, units and modern implements of production which they designed and built required a higher level of skill and the training of specialists in formerly non-existent professions.

There was only one way and that was to work and study simultaneously. Of course, there were breakdowns and periods when the complex equipment stood idle. But gradually the working class, overcoming all difficulties, stepped up the pace of economic rehabilitation and development.

Not only individual enterprises but large industrial centres, such as Smolensk, Minsk, Kiev, Voronezh, Sevastopol, Odessa and others were rising from ashes and rubble. A foreigner who visited the hero city on the Volga wrote: "The Stalingrad battle is not over, that is the most vivid impression one gets in that incredible city. And though the weapons are different the power and the speed of the attack have not changed. . . . Huge cranes, bulldozers and scrapers. . . . They are the ones that are changing the face of the earth."

Factory workers toiled side by side with the builders. Snatching a quick meal after their shift thousands of them hastened to clear the streets and squares, build roads and houses and repair the water supply system. People who had just assembled tractors, smelted steel and manufactured thousands of different articles not only helped their native city to return to life but also made it still more beautiful.

It was the same in Leningrad where *subbotniks* and *voskresniiks* were high on the order of the day. Whole families worked. There was a shortage of labour power. It was necessary to modernise and to master equipment, to draw young people into production, train them and together with them to strive for the overfulfilment of the programme. "New output, new technology, new workers mastering advanced techniques," wrote the *Leningradskaya Pravda* on June 1, 1947, "this is what characterises the entire process of in-

dustrial rehabilitation and development in post-war Leningrad."

Even in 1949, more than 57 per cent of the city's industrial workers had a service record ranging from one to three years, approximately a third were not over 26 years of age and more than 50 per cent were women. But there was not a single year when the Leningrad industry failed to fulfil the plan and in 1949 it surpassed the 1940 level. If we take into account that the number of workers was still smaller than prior to the war we shall get an even better idea of the great effort made by the veteran workers.

The re-equipment of the industry was accompanied by an improvement in the worker's skill and an increase in the scope of the competition.

Following the example of P. Bykov, G. Bortkevich and G. Nezhevenko, the innovators increased speeds of cutting metal by several dozen times. Taking advantage of the latest equipment, the increased power of the machine tools and appliances of their own design, they raised the speed of cutting to over 3,000 metres a minute. This was not an individual record. In 1948, one out of four or five operators employed high-speed methods.

The battle for speed on railways was initiated by the Komsomol crew headed by engine driver V. Blazhenov. He and his crew set themselves the goal of bringing the daily run of locomotives to 500 kilometres without breakdowns. They were successful and their example was emulated so broadly that towards the end of the five-year period there were some railway depots where all engine drivers were in the "five hundred kilometre" category.

The movement of multi-machine attendants, which was started before the war, began to spread rapidly in the post-war period. Maria Volkova, a weaver at a factory in Orekhovo-Zuyevo, led the competition in this field. Each girl on her team now serviced not four looms as prescribed by instructions, but sixteen. Their example was taken up by more and more people and in the first year of the five-year plan more than 12,000 weavers and spinners were multi-machine operators.

Collective forms of Stakhanovite labour, which were introduced by V. Matrosov, a team leader at the Paris Com-

mune footwear factory, gained increasing approbation at various industrial enterprises.

At the end of 1947, a number of Leningrad factories carefully weighed their possibilities and appealed to the working class to fulfil the five-year plan ahead of schedule. The entire population rallied to the slogan: "Five years in four". And once again numerous innovations aimed at raising labour productivity mobilising the country's internal resources and economising means and materials enriched the socialist emulation.

It is impossible to list all the patriotic initiatives displayed by the workers in the course of the first post-war five-year economic development plan. None of them were fortuitous, but mirrored the various stages in the economic development of the country.

The most important task facing the working class at first was that of increasing output, for the country was in dire need of metal, coal, oil, machine tools, tractors, motor vehicles, fabrics and footwear. It was only natural that these conditions should have engendered the mass movements of high-speed workers and multi-machine operators. In 1948, gross industrial output surpassed the 1940 figure. The first to exceed the 1940 level of production were the power engineering workers (1946) and the miners (1947). The following year, the Soviet industry topped the pre-war output of steel, motor vehicles, tractors, metal-cutting machine tools, cement, domestic appliances and other items. It took the country approximately two and a half to three years to attain the 1940 production figures.

Economic development entered a new stage with the completion of hundreds of enterprises outfitted with the most modern equipment. It was now necessary to improve the quality of production and the commitments undertaken by the workers reflected this fact. The new requirement found its expression in the initiative of Alexander Chutkikh, assistant foreman at the Krasnokholmsky Textile Mill.

Chutkikh was an experienced worker and organiser. After the war he was elected deputy to the Moscow City Soviet and co-opted into the trade commission. Checking shops, studying the requirements and examining the complaints and wishes of the public he tried to understand why there was

such a vast amount of low-quality products and who was responsible. Life was improving in the country and people wanted to dress better. Once an exhibition of low-quality products was organised in the hall of the Moscow City Soviet prior to one of its regular sessions and there Chutkikh saw a length of fabric produced at his mill. . . .

At a production meeting at his shop on January 27, 1949, he came forward with a proposal that each worker should turn out only high-quality products. His shift was already doing just that, but it was necessary to help the other workers by impressing upon them that they had to study and utilise the experience of the front-rankers who were conscientious, disciplined and never violated production technology.

He never imagined that his appeal would evoke such a tremendous response. "My only thought," he said, "was to raise the mill's workers for a decisive struggle against rejects." But what in effect was an ordinary production proposal rang out as an appeal for high-quality produce. Within a few days his initiative was taken up at thousands of industrial enterprises in all the Union republics where workers joined the competition for the honorary "high-quality team" title.

In 1949, there was a general increase in high-quality output. In the light industry it amounted to 80-90 per cent of the bulk of the manufactured products. The five-year plan targets were surpassed.

Later, when Chutkikh met V. Matrosov and other innovators he asked them whether they suspected that their proposal would win such widespread popularity. But they, too, had no idea that this would happen. "Then why did the entire nation support our initiative?" he asked himself and replied: "I believe that the answer to this question lies in the Soviet system itself. In our socialist country any helpful undertaking is encouraged and vigorously supported, and any person who has come forward with a useful initiative becomes known to all. Immediately he wins thousands and millions of followers who take up and develop his initiative."

Another new element in the operation of industry and the organisation of competition was the considerable strengthening of the creative ties between the workers and engineers, technicians and scientists.

At the start of the five-year plan a Chelyabinsk technologist, A. M. Ivanov, called upon the engineers and technicians to pay closer attention to the experience of the foremost workers and their proposals to improve production technology. Following his example many specialists assumed patronage over workers' teams, helped them to acquire theoretical knowledge and together with them searched for ways and means to improve technology and the organisation of labour.

Such co-operation was not a new development, but now it acquired concrete organisational forms and was frequently on the list of socialist emulation pledges. Industrial enterprises regularly organised scientific and technological conferences and formed composite teams consisting of workers, engineers and technicians.

There was a time when the output of rolled metal in the Urals Area lagged behind the output of its open-hearth furnaces. As a result, a large number of steel ingots accumulated at the factories. In an effort to remedy the situation V. Alexeyev, a rolling-mill operator at Verkhne-Iset Works, in co-operation with specialists developed a high-speed method of rolling sheet metal for transformers.

The newspaper *Trud* invited Alexeyev to describe his new methods at a "Stakhanovite Tuesday" organised at its editorial offices. The Head Office of the Urals Metallurgical Industry approved the new methods and authorised their introduction. Forty Stakhanovite schools were opened at factories. Within a short space of time the gap between rolling-mill and open-hearth production began to narrow and on December 7, 1948 the Urals metallurgical enterprises fulfilled the annual plan for the entire production cycle.

The "Stakhanovite Tuesday", which became a regular feature at editorial offices of the *Trud* newspaper, laid the beginning of a very effective form of inter-factory exchange of advance production experience. They took place in Moscow and the Moscow Region, in the Urals Area, in Leningrad, Dnepropetrovsk, the Donets Basin, Kharkov, Uzbekistan, Kuibyshev, Gorky, Baku, Krivoi Rog, Tbilisi, Minsk, Tula, Vladivostok and other towns.

The mass exchange of experience and the establishment of close links between science and labour resulted in a growth

in the number of inventors and rationalisers. In 1950, 655,000 innovations were introduced into production. This tremendously increased the effectivity of production, led to a growth of output and did much to facilitate labour and promote the workers' cultural level and technical knowledge.

In 1948, turner G. Bortkevich fulfilled almost 13 work quotas in a single shift. Observing him at work, Docent Ogloblin, the author of the books which the worker used during his studies, said that he would have to rewrite a whole chapter of his textbook. Just as valuable from the scientific point of view were the work methods employed by V. Karasev, N. Dubinin, M. Volkova, V. Ponomarev and many others. Each day of the Fourth Five-Year Plan period added more names to this list.

Although the Soviet working class was busy rehabilitating and developing the economy and making a great effort to safeguard world peace, it spared neither strength nor resources to help the working class in the People's Democracies to rise firmly to its feet and advance along the road of socialism. Mutual assistance in the sphere of production as a new form of international proletarian solidarity in the relations between the national contingents of workers of the world socialist community acquired large proportions.

In the first post-war years the Soviet Union granted long-term credits to the socialist countries. It also furnished them free of charge with a large number of scientific and technical documents, thousands of designs and inventions, helped them to create new branches of industry and build hundreds of industrial enterprises, shops and installations.

On December 20, 1945, the Union of Friends of the USSR at the Lenin Heavy Engineering Works in Plzen, Czechoslovakia, sent a letter to the workers of the Moscow Automobile Factory:

"On behalf of the workers, office employees and the engineering and technical personnel of the Skoda factories in Plzen we send you fraternal greetings. We suggest that we should correspond regularly and thus further our mutual friendship. We would like to learn more about the socialist emulation at your factory, for now we too will have to become shock-workers so that our nationalised factories,

which are the property of the whole people, would contribute to a general rise in the standard of life in the country."

Trade union and workers' delegations from China, Poland, Czechoslovakia, Hungary, Rumania, Bulgaria and Albania visited the Soviet Union to acquaint themselves with the life of the workers, the organisation of socialist emulation and methods of popularising the initiative of the front-rankers and innovators. Dozens of Soviet trade union and workers' delegations visited the People's Democracies where they shared their experience with production collectives.

D. Ananyeva, a weaver, and F. Shavlyugin, a mason, who with the Soviet delegation attended a congress of innovators and rationalisers in Budapest, were asked to demonstrate their work methods. They complied willingly and many Hungarian weavers and masons took over their experience.

Towards the end of the forties, thousands of workers in Bulgaria, Poland, the German Democratic Republic and Czechoslovakia were availing themselves of the experience of the innovators in the Soviet Union. Competition in multi-machine operation, high-quality production, thrifty and rational use of raw and other materials became widespread in those countries.

The Soviet working class rehabilitated and developed the country's economy and worked for the triumph of the principles of socialist internationalism in the exceptionally difficult conditions of the first post-war years. Western imperialists were establishing military blocs, brandishing atomic weapons and promoting the cold war. In these circumstances the Soviet Union had no alternative other than to allot increasing funds to augment its defensive capacity and create its own atomic and hydrogen weapons and rocketry.

Large as the peaceful budget was, its possibilities were not unlimited.

The Soviet people have long since become accustomed to jet airliners, electric and diesel locomotives, the extensive housing development programme and the building of new towns. More than a half of the country's population regularly watches TV and television programmes from Moscow are relayed to the Far East via communications satellites. Besides Moscow there are underground railways in Lenin-

grad, Kiev, Baku and Tbilisi, and they are being built in Kharkov, Tashkent and other cities.

Industry and trade cannot keep up with the mounting requirements for domestic refrigerators, washing machines, cine cameras and transistors which are manufactured by the million.

Tuition fees in secondary schools and institutions of higher learning were abolished a long time ago, and the working week was reduced to five days.

But the situation was wholly different 25 years ago, during the post-war rehabilitation period.

Then space exploration was still a matter of the distant future. Years would pass before the first atomic power station would be commissioned and the TU-104 and other jet airliners would start servicing the air routes. In those years the civil airlines were serviced only by piston-engined aircraft. The production of steam locomotives was still developing in the period of the Fourth Five-Year Plan and the length of electrified railways had not even reached 1,000 kilometres.

At the time only 20 million square metres of housing were built each year, or a fifth of the present-day figure, and over 50 per cent of the houses were made of wood. Only Moscow had an underground railway. There were only two TV stations. From 1948, the year they went in operation, to 1951, TV programmes were broadcast only twice a week. In 1950, Soviet factories manufactured some 15,000 TV sets, 1,200 domestic refrigerators and 300 washing machines. There were no Soviet-made cine cameras, electric razors and many other items.

Fees were paid for tuition in the upper classes at school and institutes. There was a six-day working week and the working day was eight hours long. A person could not quit his job without the consent of the administration of his factory, office or any other organisation where he was employed.

Miners, communications workers, diplomats and people of many other professions wore uniforms. Countless numbers of people were still dressed in military tunics, overcoats and boots. A long time would pass before the industry starts producing attractive synthetic garments.

The working class, however, was aware of the transient nature of the post-war difficulties and that the Government was doing its utmost to surmount them with the utmost speed.

Preparations to abolish the rationing system were started immediately after the war and if not for the drought which struck the country in 1946, the reform would have taken place in the first year of the five-year plan. The crop failure, however, prevented the state from laying in the necessary stocks of food, yet the Government expanded the sale of unrationed commodities and reduced their prices. Moreover, all workers in key industries had their wages raised by 20 per cent in 1946.

At the end of 1947, the Government abolished the rationing system and carried through a monetary reform which strengthened the ruble.

The real incomes also increased as a result of the lifting of the wartime taxes, the growth of public funds and the annual price cuts on food and industrial goods. The working and living conditions of the population improved.

The rise in the general welfare of the population had a favourable impact on the life and work of the working class. It was quite natural that industrial development led to a further rise in the standard of living.

But there were errors which in some measure impeded the rehabilitation process. First and foremost there were miscalculations in planning in the field of material and technical supply and in the organisation of emulation. Nevertheless, nothing could stop socialism's victorious march.

In 1950, West European industry was still lagging behind its pre-war level despite the assistance of overseas banks. Food was still rationed out to British workers and unemployment once again came into its own in the capitalist world.

But the Soviet Union had already successfully completed post-war rehabilitation and its working class with a still greater display of energy resumed socialist construction which was interrupted by the Nazi aggression.

The Great Construction Sites At the end of the forties and the beginning of the fifties, the USSR passed to the next stage in the development of the socialist economy. Its industrial enterprises fulfilled the Fourth Five-Year Plan ahead of

schedule; in 1950, gross industrial output exceeded the 1940 level by 73 per cent instead of the planned 48 per cent. In this period labour productivity (per worker) in industry rose 45 per cent, and 25 per cent in the building industry.

The Fifth Five-Year Development Plan for 1951-55 envisaged that the number of workers and office employees in the national economy would increase by approximately 15 per cent and labour productivity would rise by 50 per cent in industry and by 55 per cent in the building industry. It also provided for extensive introduction of modern technology and equipment, improvement of labour organisation and a considerable rise in the technical and cultural level of the working class. Special emphasis was placed on giving a further boost to the mass movement of rationalisers and innovators and to complete in the main the mechanisation of arduous and labour-intensive jobs at factories and construction sites.

Technological progress called above all for the expansion of the fuel and power base, electrification and the mass introduction of automatic and semi-automatic equipment. The building of giant power stations and grids and the development of newly discovered oil and gas deposits was started.

In those days the most important projects were called the great communist construction projects. They were great indeed and not only because of the unprecedented scope and scale of work and the bold wish to transform nature and place it at the service of man, but also because of the creative inspiration and the genuine enthusiasm of the Soviet working class.

The most powerful and sophisticated equipment was delivered to the construction sites of the Kuibyshev, Stalin-grad and Kakhovka Hydroelectric Power stations and the Volga-Don Canal. It required a whole freight train to transport the ESh 14/65 excavator made at the Uralmash Works to the construction site of the Volga-Don Canal. Its scoop was large enough to hold an automobile, and it could perform the work of 10,000 diggers.

Anatoly Uskov, who was in charge of the walking excavator, wrote: "Our country has provided us, builders, with splendid machines and in sufficient numbers to complete the

canal ahead of the fixed time." He and his team undertook to fulfil the annual earthwork plan by October 1, and not by December 1, 1951. Challenging the teams of other excavators to compete with them, they said: "Let us work without breakdowns so that when our job is completed we would be able to transfer the excavator to another construction site in full working order."

Their challenge was taken up by dozens of other front-rankers. In the neighbouring sector operator Kaplunovsky on a walking excavator with a smaller scoop began to move 2,114 cubic metres of earth instead of 986. The team headed by Dmitry Slepukha doubled its labour productivity. Shortly these achievements were surpassed by excavator operators Nikolai Rasich and Ivan Krutin. The enthusiasm of the front-rankers inspired thousands of other workers.

The Volga-Don Canal was completed two years ahead of schedule. At 13:55 hours Moscow time on May 31, 1952, the Volga merged with the Don. The Tsimlyanskoye Sea appeared on the map of the Soviet Union and at the same time the first section of the Tsimlyanskaya Hydroelectric Power Station was put in operation.

Meanwhile the construction of the Kuibyshev Hydroelectric Power Station was gaining momentum. Part of the workers arrived directly from the Volga-Don Canal. They came in teams bringing along their tested equipment. Alexei Ulesov, a graduate from a factory apprenticeship school, a former fitter who won fame as an electric welder at the construction site of the Volga-Don Canal was among the newcomers. In three years he fulfilled almost ten annual plans and was among the foremost workers who were awarded the title of Hero of Socialist Labour. Now, at the construction site of the Kuibyshev station at the foot of the Zhiguli Hills he had to master new welding techniques. Brilliantly coping with the assignment he himself trained many other welders and was awarded the second Gold Star of Hero of Socialist Labour.

Thousands of young workers gave an excellent account of themselves. Building what in those days was the world's biggest power station they worked with no less enthusiasm than was displayed by the older generation who built the Magnitogorsk Works, the town Komsomolsk-on-Amur, who

developed the Khibini deposits and built the Turkestan-Siberian Railway. When necessary they worked two shifts in a row, and when the thaw set in Boris Chupurnoi, Ivan Polyaninov and other electric welders worked waist-deep in icy water welding the pipes. "The temperature dropped to -35°C . There were hurricane winds, but people fulfilled two and even three quotas. . . . Working at a great height with safety belts attached we welded metal sections in the freezing wind. But no one complained. Volodya Yarovenko whose face was frostbitten refused to go to the hospital saying that a Komsomol member had no business taking it easy when there was so much work to be done. Smearing vaseline over the sore spots he pulled a scarf over his face and resumed his job."

The builders of the Kuibyshev project surpassed all world records in such fields as the speed and volume of earthwork, the placing of concrete and assembly of structures and parts and the blocking of rivers. It was not surprising, for they had the necessary technical knowledge, equipment and experience. The working class displayed its ideological and political maturity and utter dedication to their cause.

The same could be said of the builders at other shock-work construction sites. Economic and public organisations directing the building of the Kakhovka and Volgograd Hydroelectric Power stations, the oil fields on the Caspian Sea, metallurgical factories in the Transcaucasus and Kazakhstan were flooded with letters, applications and telegrams. "We, tractor drivers, veterans of the heroic defence of Stalingrad," wrote Burlakov, Tomilin and Smolin, "are eager to take part in the construction of the Stalingrad Hydroelectric Power Station." Enthusiasts arrived from all parts of the country and so did the equipment and machines: the Urals Area sent excavators, Minsk and Yaroslavl tip-up lorries and other motor vehicles, Leningrad, Moscow, Kiev, Riga, and Baku dispatched diverse other equipment.

The great construction sites were in the focus of attention of the entire country and their builders were an inspiring example to the other contingents of the working class.

On the whole the initial period of the Fifth Five-Year Plan was characterised by a further growth of the country's industrial might engendered by the creative labour of many

millions of people and their successful efforts to fulfil the economic development plans. Annual gross output targets were surpassed and the country received considerable quantities of ferrous metal, coal, oil, many types of machine tools, electricity, a large number of motor vehicles, tractors, combines and other items over and above the plan. But at the same time serious shortcomings came to light.

The productivity of labour rose at a slower rate than planned and in some branches it lagged behind the growth of wages. In 1953, the enterprises of the coal-mining, transport and heavy machine-building, timber and paper, building materials and food industries failed to attain the planned growth in labour productivity. The timber and coal industry enterprises were the most backward in this respect.

A large gap existed between the production results of the leaders of the socialist emulation on the one hand, and the bulk of the workers, on the other. In various branches of production the efficiency of the equipment of the front-rankers was from 15 to 20 per cent higher.

It should be noted that there was a link between these shortcomings and the general organisational level of the competition. On the one hand, the miscalculations in the organisation of the competition had a negative impact on the work of the industry, while on the other, the disproportions in the development of various industries, inadequate mechanisation of labour-intensive processes and similar circumstances left their mark on the organisation of the creative activity of industrial and office workers, impeded regular exchanges of experience and timely and effective popularisation of the foremost achievements.

In 1949, the Tenth Congress of the Trade Unions of the USSR underlined that there were not only successes but also definite shortcomings in the organisation of competition. Many enterprises clearly underestimated the workers' initiative. By no means all appeals were backed up by a serious analysis of the available possibilities, the required political and educational work and the introduction of measures which would have helped to popularise the best achievements of the front-rankers.

In 1951, the Party Central Committee and the Soviet Government adopted a decision calling for a further upsurge

in the socialist competition and improvement of its organisation. The decision indicted that the struggle for higher quality, economy of fuel and materials and for the fulfilment of all the planned targets was still insufficiently energetic. It criticised the industrial executives who did not discuss their pledges with the workers and who paid little attention to the timely and effective introduction of the experience of the innovators.

Nonetheless, the decision did not bring about any fundamental improvements. As before, the objective basis of the competition, its links with the general development of industry and the organisation of labour and wages was not examined as thoroughly as it should have been. And although each and every initiative was considered and discussed at various meetings and the trade union organisations passed corresponding decisions on almost all of them, the main attention was concentrated on the attainment of quantitative indices.

There was a system of material and moral incentive for the front-rank workers (premiums, bonuses, challenge Red Banners, award of government orders and medals, certificates of merit, and so on and so forth), but workers and workers' collectives who did not fulfil their undertakings were never held seriously responsible. The newspapers almost daily printed reports about one or another enterprise assuming fresh undertakings, and yet it was not the practice to inform the public about the enterprises or collectives which did not meet their obligations and the reasons why they had failed to do so. In the long run all this impeded the growth of the creative activity of the working class.

The turning point came in the course of the struggle for the reintroduction and development of the Leninist principles in the political and economic activity of Soviet society.

On June 6, 1954, the *Pravda* carried a letter to the editor entitled "Put an End to Elements of Bureaucracy in the Leadership of the Emulation". Signed by well-known innovators P. Bykov and A. Chutkikh it expressed the feelings and thoughts of all the front-rank workers. It sharply criticised those leaders who could not grasp the socialist character of the creative activity of the Soviet people and who strove to conduct the competition within the framework

of the old, now obsolete, rules. As an example they mentioned the fact that some ministries, with the consent of the Central Committee of the Trade Unions and the All-Union Central Council of Trade Unions, refused to open schools of advanced experience for the sole reason that their establishment was not envisaged in their plans.

The expediency, perhaps even the necessity, of a major discussion of the methods of guiding the socialist competition was supported by the Eleventh Congress of Trade Unions held in June 1954. The report on the activity of the All-Union Central Council of Trade Unions delivered by N. M. Shvernik and the speeches of the delegates sharply censured the shortcomings which were mainly caused by bureaucratic practices.

In a special decision the delegates demanded "vigorous measures to uproot formalism and bureaucratic distortions in such a vital and creative matter as socialist competition". They called upon all trade union functionaries and the public at large to take steps to correct the shortcomings in the organisation of the competition.

Many production collectives developed a more responsible approach to their undertakings, particularly during the preparations for the Congress and even more so after it had been held. The general atmosphere of criticism of the shortcomings and a more sober appraisal of the actual achievements encouraged people to condemn the adoption of unrealistic, overstated pledges. The workers concentrated much of their efforts on tapping additional production reserves, economising the consumption of raw and other materials and fuel, preventing the loss of time during shifts and on collectively raising the productivity of labour.

That year wide interest was aroused by reviews, contests and other similar measures designed to heighten the creative activity of the workers.

In the coal industry, for instance, two months were designated for the study and introduction of innovations and rationalisation proposals. At the Parkhomenko Factory in Lugansk a specially formed commission considered 60 rationalisation proposals which were submitted in 1953 but which had not been put into effect; 35 were described as useful and 13 were put into effect cutting down produc-

tion costs by 118,000 rubles. To make the competition a success, its objectives were discussed at meetings at the mines and other coal industry enterprises, and consultation teams were set up to help the rationalisers.

The all-Union conferences of industrial and building workers which took place in 1954 and 1955 thoroughly analysed the general course of the development of socialist industry and disclosed additional resources which the workers participating in the socialist emulation could put to good use. In May 1955, the Party Central Committee and the USSR Council of Ministers in its letter "On Measures to Ensure the Further Development of Industry" called upon all industrial workers to correct the shortcomings in the organisation of production and socialist competition and to open the way for the broad popularisation of advanced production experience. The letter was discussed at industrial enterprises with the active participation of the workers who strove to ascertain the causes of the mistakes and find ways of overcoming them.

In July 1955, a Plenary Meeting of the Party Central Committee discussed the question of further promoting technological progress. The industrial workers promptly responded to the Party's appeal to boost a powerful industrial production and thus give an additional impetus to the building of communism in the country. The All-Union Central Council of Trade Unions revised the terms of the all-Union and Republican socialist competition to focus the attention of the workers participating in them on the introduction of new techniques and advanced technology.

The former conditions of the competition and methods of encouraging the winners which were identical in all branches of the economy were revised. Priority was given to encouraging the front-rankers in conformity with concrete production conditions at various industries and enterprises. In other words, the accent was made on promoting the development of the creative initiative of the local organisations. Now, in addition to attaining all the technical-economic targets of the production plan, those taking part in the competition had to fulfil the plans of installing and mastering new machines and putting rationalisation proposals and inventions into effect.

The results were almost immediate.

At the end of 1955, milling-machine operator A. Loginov assisted by instructor in the mechanisation of labour-intensive jobs P. Zaichenko drew up individual composite plans for introducing advance work methods for each worker. Initially the new plans were discussed at factories, then at the Leningrad Regional Committee of the Party and then in Moscow at a conference in the ministry. No one doubted that it was a valuable initiative and the implementation of these plans led to a considerable rise in labour productivity at all factories. A. Loginov, for example, regularly exceeded his daily work quota by 80 and even 100 per cent.

A careful study of Loginov's plan showed that it differed substantially from the pledges which were usually made at the time and in the preceding years. The question was not only confined to the complexity of the tasks which the innovator had set himself. A basically new aspect was the co-operation between the front-rank workers and the factory administration, between the workers and economic executives. All the measures which Loginov intended to put through were ensured. The preparatory work was conducted by shop superintendents and heads of technical departments. In other words, the plan had the necessary organisational and technical prerequisites and the conditions ensuring its fulfilment were agreed on in advance.

The Leningrad worker V. Y. Karasev called the composite plans bilateral commitments. "On the one hand," he wrote, "they include demands which the administration is obliged to fulfil, and on the other, they include the undertakings of the worker himself. The plans could now be formulated as follows: 'If all my demands are met I promise to raise labour productivity by so much.' Both sides were concerned, and it was no longer the case of 'you do it, and no more talk'. Now we help each other and bear joint responsibility."

The measures taken by the Party and the Government at the end of the Fifth Five-Year Plan period unfettered the creative initiative of the working class and promoted the technical progress of the masses. The slow growth in the number of inventors and rationalisers at the end of the forties and the beginning of the fifties rapidly gained in speed and by 1955 there were twice as many of them as in 1950.

Not all labour-intensive jobs were mechanised. Labour productivity in industry rose 44 per cent instead of the planned 50, and 45 per cent in building which was ten per cent short of the mark. But on the whole the plan was fulfilled ahead of schedule.

Many large hydroelectric power stations, including the Verkhne-Svirskaya, Mingeaur and Ust-Kamenogorsk, were put in operation during the five-year period. The construction of the first atomic power station was completed, giant thermal power stations were commissioned and the Kuibyshev Hydroelectric Power Station started generating electricity.

Other enterprises completed in the period included the Transcaucasian metallurgical and the Baku pipe works, the first blast furnaces in Cherepovets and the Orsk-Khalilovo Works, and a large number of pits in the Donets, Kuznetsk, Karaganda and Pechora basins and in the Urals Area.

At the same time many operating enterprises were reconstructed and re-equipped on the basis of the latest equipment, composite mechanisation and automation of production. As a result, over 66 per cent of the total growth of industrial output was obtained through a rise in labour productivity. Despite the difficulties which stood in the way of the fulfilment of the Fifth Five-Year Plan, the working class increased the volume of industrial output by 85 per cent instead of the planned 70 per cent.

**Under the Banner of
the Twentieth
CPSU Congress**

The Twentieth Congress of the CPSU was held in February 1956. By then almost three years had passed since the death of J. V. Stalin. The hopes of socialism's enemies for disunity in the leadership of the Party and the country did not materialise. Backed by the entire people the Communists once again demonstrated the solidity of their ranks. The Party vigorously and boldly condemned the mistakes bred by the Stalin personality cult and outlined measures to rectify them. Very important in this respect was the exposure of the criminal activity conducted by Beria who was the country's Internal Affairs Minister for many years. Steps were taken to strengthen socialist legality and the unjustifiably sentenced people, including a large group of Party and Komsomol

workers, state and economic executives, military leaders and scientific and cultural workers, were fully exonerated.

The line of observing Leninist standards and principles in all spheres of Party and state activity considerably strengthened the Party and enhanced its role in communist construction. The trade unions and the Komsomol invigorated their activity. More extensive rights were granted to the Union republics in the sphere of economic management and a part of the industrial enterprises was placed under Republican control. Measures were taken to do away with excessive centralisation of planning.

One of the general tasks was that of boosting the initiative of the masses, above all the working class, in furthering the cause of communist construction.

The working class intensified its political and labour activity as could be judged by the mounting scope of socialist emulation, the vigorous activity of front-rank workers in the Soviets, in all public organisations, the leading role of the workers in the development of new regions and their assistance to agricultural workers.

Immediately following the Plenary Meeting of the Party Central Committee held in September 1953, a large number of industrial workers volunteered to go to the countryside to help organise production at the backward collective farms, and tens of thousands of townsfolk settled down in villages.

The development of virgin lands was launched in the spring of 1954 and all industrial centres participated in this nation-wide effort.

By the end of February 1954, the Komsomol committees alone received over half a million applications from members requesting to be sent to the virgin lands. They came from drivers, fitters, weavers, builders and people of many other occupations. Over 350,000 Komsomol members were selected and in the ensuing three years helped to establish 425 state farms and develop 36 million hectares. Each state farm constituted a new detachment of workers in agriculture, yet another source augmenting the creative capability of the working class.

There was a general upsurge of activity in all sectors of socialist construction. After the Twentieth Party Congress the initiative of the workers manifested itself with fresh

force. The discussion of the directives of the Twentieth CPSU Congress for the Sixth Five-Year Economic Development Plan in the shops of the Moscow Grinding Machine Factory remained long in the minds of the workers who wholly approved the plan for a fivefold increase in automatic and semi-automatic equipment.

Leningrad metalworkers, Donets Basin miners, the Kupavna textile workers and the builders of the cascade of hydroelectric power stations on the Volga pledged to work still better.

The Twentieth Congress took place in an atmosphere of a great labour upsurge. It was attended by 1,430 delegates representing an army of seven million Communists. Compared with the previous congress the number of worker-delegates increased 2.7 times. Many innovators of production, including excavator operator M. Yevets, locomotive driver V. Bazhenov, weaver M. Rozhneva and turner A. Smirnov attended the sittings in the Kremlin. The Congress fully approved the political line and the practical activity of the Central Committee in the period between the congresses. Delegate N. Kuzmin, a turner, said: "At a large meeting held two days ago at our Krasny Proletary Machine-Tool Factory the workers, engineers and office personnel unanimously decided to thank the Party Central Committee and the Soviet Government for their great solicitude for the Soviet people. I am honoured and gratified to be able to express their thanks to the Central Committee and the Government from the congress rostrum. I believe that I am expressing the wishes of all Soviet people, their loyalty to and affection for the Communist Party." These words were uttered by a front-rank worker who had fulfilled 25 annual work quotas in the five-year period, and who spoke for the entire working class of the USSR.

V. Karasev, who was elected member of the CPSU Central Committee, wrote: "It is hard to describe my feelings. But I am fully conscious of the most important thing: I am a delegate of the Kirov workers, of Leningrad, of our whole working class. I consider it a great honour for the factory where I work, for my comrades, for a Soviet working man. A great responsibility has developed upon me. The innovators of production and their role discussed at such

length at the Congress directly concerns us, workers. The Party has instructed the innovators to lead the struggle for economy of metal, fuel and power and for the growth of labour productivity."

The words of N. Kuzmin and V. Karasev, the concrete proposals aimed at boosting production advanced by thousands of workers, engineers and office personnel at their enterprises fully reflected the thoughts of the entire people. Life showed that the socialist emulation was rapidly acquiring a new content and moving towards a higher level. The Donets Basin miners were the first to prove this.

N. Mamai was 17 when he volunteered for the front in 1943. He was a gunner. Upon demobilisation he became a miner at Pit Severnaya-2 in Krasnodon. Thanks to his soldier's training, persistence, physical strength and probing mind, he made considerable progress and was placed in charge of a team of cutters.

As the country prepared to mark the 39th anniversary of the October Socialist Revolution, the Donets Basin miners undertook certain commitments in the socialist emulation. At the time formalism was fairly widespread at the pit. Not all the workers took part in the competition and a fairly large group of young miners did not fulfil their work quotas. It was hard to check whether they had fulfilled their pledges in the socialist emulation and more often than not these pledges existed only on paper. Sometimes a miner neither wrote down nor saw the list of the pledges he was supposed to fulfil. They were made on his behalf at the rate-setting department.

Discussing their pre-anniversary undertakings in the socialist emulation Mamai's team of cutters searched for ways of sharply raising the productivity of labour.

"What if we should attempt to break a record. Let our team leader fulfil 10 work quotas," someone proposed.

"Suppose I do break the output record, but what will the other members do?" Mamai asked and added: "No. We don't need a record. What should be done is to organise our work in such a way that every cutter should systematically exceed his quota. Not even the highest individual record would be as effective as the highly productive labour of each miner."

"We have to work in such a manner," he said, "that each cutter could say after his shift that 'today I hewed one or two and even three tons of coal in excess of the quota'."

That was how the simple and understandable appeal "as many tons of above-plan coal as there are cutters in a team" was born. The team's initiative evoked an immediate response not only among the miners, but also among workers of the metal working, chemical, oil and textile industries.

Mamai's initiative was further developed by Alexander Kolchik who became a miner in 1955 and developed a deep attachment to his occupation. The Lutugin Pit of the Chistyakov-Anthrinite Trust where Kolchik was a team leader received a government subsidy. Pondering on what should be done to make the pit a paying concern, he decided that this could be attained by implementing up Mamai's proposal and simultaneously economising just one ruble on each ton of above-plan coal. Kolchik's team set down to calculations, drew up a plan of work, mastered related occupations and learned to save minutes and kopecks. The quantitative indicator was supplemented by a fixed qualitative indicator easily accessible to any worker.

Under the motto "Mamai-Kolchik" the competition launched in Krasnodon spread to other coal basins, factories and construction sites. In 1958, the All-Union Central Council of Trade Unions passed a resolution to develop further the competition involving the method of the Donets Basin miners. No sooner had the resolution been handed down to the local trade union organisations than it had to be extended to include proposals put forward by Azov steelmakers, the workers of Moscow footwear factories and the workers of the Kuznetsk Basin.

The open-hearth shops at Azovstal Works regularly produced substandard metal. N. Pereverzev's team found a way out to remedy the situation. At first they mastered Mamai's method, then Kolchik's and finally pledged not only to fulfil the plan systematically and cut production costs, but also to work wholly without rejects.

Similar developments took place at the Kapranov Shoe Factory in Moscow where the shift under foreman Maria Chepeleva undertook to reduce the production of non-first-

class footwear to the minimum. Having joined the enterprise in 1935 she knew exactly what her team was capable of. She drew up a system of organisational and technical measures and together with the other workers introduced mutual control and achieved the goal she had set herself.

On June 29, 1958, a group of front-rankers at the Pioneer Pit in the Kuznetsk Basin wrote in the newspaper *Trud*: "We heard about the initiative of Maria Chepeleva of the Moscow Shoe Factory and discussed her method at a trade union meeting. Although our conditions of work are wholly different, we express our wholehearted support for the Muscovites and say: 'You have started the movement, we shall continue it.'"

The miners, even before they learned about the initiative of the Azov steelmakers, proposed to combine the methods of Mamai, Kolchik and Chepeleva and put forward the slogan: "More, cheaper, better". The All-Union Central Council of Trade Unions endorsed the plans of the innovators and took steps to popularise the achievements attained in the competition "for high labour productivity, lower production costs and better quality".

The mounting activity of the trade unions likewise reflected the growing role of the working class in the life of Soviet society. In 1951, only 9.2 per cent of the deputies to the Supreme Soviet of the RSFSR were workers, but in 1959, they comprised 26.6 per cent; their share among the deputies to city Soviets equalled 39.4 per cent. Among those who applied for candidate membership in the CPSU in the period from 1952 to 1955, 27.2 per cent were workers; after the Twentieth Congress of the CPSU (1956-61) their share rose to 40.6 per cent.

In December 1957, a Plenary Meeting of the CPSU Central Committee examined the activity of the trade unions and discussed measures to intensify their participation in drawing industrial and office workers into the management of production. In July 1958, the Presidium of the USSR Supreme Soviet approved the Regulations on the Rights of Factory and Trade Union Committees. Trade union organisations were accorded the right to participate in formulating draft production plans and capital construction plans, to hear reports on their progress and also on how the admini-

stration was carrying out its commitments undertaken in the collective agreements.

The administration was not allowed to review and fix production quotas and rates and to dismiss workers without the consent and the participation of the trade union committee. The trade unions could raise the question of dismissing or punishing the heads of industrial and other enterprises who failed to fulfil their commitments under the collective agreement and those who violated labour legislation. In appointing people to leading posts the administration was obliged to take the views of the trade union committee into account.

Another measure put forward at the December 1957 Plenary Meeting of the CC CPSU, that of drawing the broadest masses into the management of production, acquired legislative force. The production meetings at which the workers disclosed shortcomings, came forward with suggestions, and so forth, became permanent organs.

In 1958, the trade unions established the All-Union Society of Inventors and Rationalisers. V. Seminsky, a turner at the Krasny Excavator Works in Kiev, wrote as far back as 1956: "Innovators of production are working hard to develop devices and appliances which would make it possible to raise the productivity of labour. They are endeavouring to make them applicable to various branches of production. I have also designed several, and practice has proved that their application will enable any turner to raise labour productivity by 1.5 to 2 times. But their introduction is taking place at random with no one bearing the responsibility. At the same time it is obvious that a device which has been instrumental in raising labour productivity at one factory and enabled it to save thousands of rubles would produce a much greater effect if applied at all factories." Seminsky wondered why the experience of front-rank workers was not popularised as widely as it deserved and why was not there an organisation for the introduction of technical achievements on a country-wide scale. The establishment of the All-Union Society was in the interests of all inventors and rationalisers who numbered 1,725,000 in 1958, or three times as many as in 1950.

The great labour and political activity of the working

class is one of socialism's most important achievements, a tremendous accelerator of the advance towards communism.

**Strengthening
the Technical Basis
of Agriculture**

In the autumn of 1953, the press reported that Prokofi Nektov, a combine operator at the Belozersk Machine-and-Tractor Station in Chelyabinsk Region, was awarded the title of Hero of Socialist Labour. Life struck a heavy blow at the former Stakhanovite tractor driver. At the end of 1942, he was sent to the frontlines and was heavily wounded in battles on the Lovat River. Regaining consciousness, both his legs frostbitten, he managed to climb out of a shellhole and losing and regaining consciousness crawled to his unit. He was hospitalised and underwent 12 surgical operations. At the end of 1943, with both legs amputated, he returned to his native village of Kazanka. But his will was not broken. Like the worker Alexei Maresyev, a pilot who also lost both legs but returned to the Air Force and continued to fly, Nektov took up his old occupation and even became a foremost tractor driver and combine operator.

Agricultural machine operators came to play a still greater role in the rural districts than they did prior to the war. Thanks to the efforts of this industrial detachment the Soviet villages healed the war wounds and developed. Many machine operators attained phenomenal results. For example by 1953, S. Y. Pyatnitsa, a combine operator in Altai Territory, had fulfilled 50 yearly quotas. On the whole, labour productivity in the state farms in 1955 was 123 per cent of the 1940 level and in 1959, attained still higher level and equalled 158 per cent. The rate of growth of labour productivity in the collective farms was even faster: in 1955, it was 36 per cent higher than prior to the war and by 1959, it increased to 77 per cent. Thus the gap in the production of state and co-operative farms gradually narrowed.

Aware of the fact that machine operators played the leading role in developing the countryside, the Government spent generous sums on their training. Hundreds of thousands of tractor and combine operators and drivers were annually trained for work in the countryside. In 1950, a total of 513,000 farm-machine operators were trained, in 1953—598,000, in 1959—478,000 and in 1966—714,000. The Gov-

ernment created conditions making skilled agricultural workers and specialists who found employment in other branches of production want to return to state and collective farms and machine-and-tractor stations.

Between 1952 and 1958, the Government widely practised the planned, centralised recruitment of urban workers to the rural districts. In September 1953, a Plenary Meeting of the CC CPSU decided to put the tractor drivers on the staff of the machine-and-tractor stations. The Party called on the former farm-machine operators who had changed their occupations to return to the villages. The appeal was also addressed to all those who could be of use in developing agricultural production. Thousands of people responded. A group of railwaymen wrote a letter to the Ramensk Machine-and-Tractor Station in Moscow Region: "In response to the appeal of the Party and the Government," they said, "we should like to work at the machine-and-tractor station." About 50,000 farm-machine operators who had found employment in industry and other branches of the economy returned to the machine-and-tractor stations by February 1954.

Towns furnished considerable assistance in forming cadres to guide agricultural production. The most urgent task was to improve the composition of the managerial personnel. In 1953, some 82 per cent of collective farm chairmen lacked the required standard of education, but by 1955 this figure dropped to about 71 per cent. Although it was a definite improvement, it was still far short of the mark.

On March 25, 1955, the Party Central Committee and the USSR Council of Ministers published an appeal to all Party, government, trade union and Komsomol organisations, to workers, engineers and technicians and employees to help reinforce the backward collective farms with managerial personnel. It was planned to send 30,000 people. Counting those who had already been sent to the villages, over 32,000 people were assigned to the farms.

Many of them had worked at factories, some became engineers, others remained workers. But all of them had enormous production experience. At a Party meeting held at the Krasny Oktyabr Works in Stalingrad, head of a team of fitters of Open-Hearth Furnace Shop No. 2, Yegorov

said: "Work in the countryside is an honourable assignment designated by the Party and the people. I am very keen on working and living at a collective farm, where great problems of the development of socialist agriculture are being solved. If I am put in charge of some sector at a collective farm, I shall do my best to uphold the honour of our shop and to live up to the trust placed in me by its workers."

Just as during the movement of the twenty-five thousanders during the collectivisation period, the flow of applications from workers to be sent to the rural areas by far exceeded the planned target and topped 100,000. Special selection committees were set up by district, city and regional Party committees. From 85 to 95 per cent of the thirty-thousanders were Communists, one to four per cent were Komsomol members. Industrial workers comprised 20.6 per cent.

As did the twenty-five thousanders, many of the thirty-thousanders, the new collective farm chairmen, sought the advice of the old managerial personnel and availed themselves of their vast experience.

The thirty-thousanders were collective farm chairmen during the crucial period of the reorganisation of agriculture which took place after the September 1953 Plenary Meeting of the Party Central Committee.

By sending skilled personnel to the villages, the towns helped to surmount the difficulties in agriculture and contributed to the common cause of communist construction.

Improvement of the People's Welfare

The great labour effort of the working class and the scope and scale of socialist competition accelerated the development of the Soviet economy creating increasingly favourable conditions for improving the general welfare of the working class and the population as a whole.

Already at the beginning of the fifties, the standard of living of workers' families attained a much higher level than in the post-war rehabilitation period.

A comparison of food prices in 1948 and in the spring of 1952 will show that the price of bread, for example, dropped by 50 per cent, butter and meat by over 50 per cent, tea by 35 per cent, sugar by 21 per cent, and so forth. In 1953, for

example, the price of bread, sugar, meat, butter, potatoes and fruits was 50 per cent lower than in 1950.

In the mid-fifties, the Government launched a programme of raising the wages of workers and employees in the lower wage bracket. Time-rate payment was more extensively introduced and the rating and bonus system was revised and unified. Compared with the period from 1951 to 1953, the average annual growth of wages increased twofold between 1956-58. The wages of skilled and unskilled workers were brought into greater conformity. On the whole, the wages of workers and employees throughout the country rose by 21.5 per cent between 1951 and 1958.

Moreover, there were other factors which considerably raised the incomes of workers' families: the passage of the 1956 pension law, the cut in taxes, termination of the floating of state loans, growth of payments and benefits out of public consumption funds and the abolition of tuition fees in secondary schools (senior grades), technical schools and institutions of higher learning.

In 1956, *Komsomolskaya Pravda* correspondents visited a Gorky worker S. A. Andrianov. They wanted to know how his family budget had changed in the last year, its expenditures and sources of income. The head of the family Semyon Andrianov retired on pension after 25 years of work. In keeping with the law his pension amounted to 850 rubles (in old currency) or 55 per cent of his average wage plus ten per cent for uninterrupted service and another 15 per cent for dependants. This brought his pension to 1,200 rubles a month. Compared with 1955, his contribution to the family budget dropped from 18,520 to 17,500 rubles. At the same time one of his daughters began receiving a stipend with a bonus, and another daughter, Alya, a student of a technical school made her first contribution to the budget. There were other incomes: in a year they received 1,800 rubles on bonds paid off and on winnings on state lottery bonds, the family also earned 800 rubles helping to procure vegetables for the factory canteen, and Andrianov's wife received 200 rubles as a bonus. They also collected 11 sacks of potatoes from their individual plot. Their cost was also included in the budget. As a result, the family earned 41,530 rubles in a year.

How was this income distributed?

While in 1955, the family spent 61.1 per cent of the entire income on food, in 1956, this figure dropped by 13.6 per cent, or 3,460 rubles.

Considerably more money was spent on theatres, the cinema and books, the purchase of furniture and household appliances.

It should also be taken into account that the Andrianovs received an additional 15,576 rubles, a sum exceeding a third of their budget, from state. In Gorky the state expended an average of 198 rubles per capita on medical assistance, therefore, the annual amount spent on all the members of the family was 1,386 rubles.

Andrianov's three children studied. The stipends of his two daughters were included into the budget, but at the same time their education and that of his son, who was a schoolboy, cost the state 17,030 rubles.

Another source of income was rest and treatment at young pioneer camps and sanatoria. The Government expended 3,100 rubles annually on these needs for a family of seven.

These were the invisible incomes which swelled the budgets of all Soviet families. In the period from 1951 to 1958, the total sum of payments and benefits received by the population increased almost twofold.

The rise in real wages enabled the workers to spend more on food and clothes. The consumption of meat and fish products, milk, sour cream, cottage cheese, sugar and other food with a high calory content mounted. Workers began purchasing more woollen fabrics, knitted goods, silk, shoes, expensive clothes, furniture, TV sets, refrigerators and cameras.

Investments in housing construction and development of public utilities increased from year to year. The building of apartment houses assumed especially large proportions in 1957 following the passing of a special decision on this issue. Thanks to the introduction of industrial building methods millions of people were able to move into modern flats within a short space of time. About 153 million sqm of housing, or a third more than in the entire Fifth Five-Year Plan period, were built in towns and workers' townships between 1956 and 1958. Nevertheless, the housing problem remained acute.

In general, the standard of living rose rapidly and this in turn had a favourable impact on the development of the socialist method of production. In the period from 1956 to 1958, two or three large industrial projects were put in operation each day, and four or five new types of machines and equipment were designed. These years saw the launching of the world's first atomic-power icebreaker *Lenin* and the commissioning of the world's most powerful accelerator of atomic particles in Dubna. On October 4, 1957, the Soviet Union launched the world's first sputnik thus inaugurating the space age. Each of these achievements testified to the industrial might of the Soviet Union and the inexhaustible abilities of the Soviet working class.

In 1958, the Soviet Union produced 55 million tons of steel, 113 million tons of oil and 233,000 million kwh of electricity. This meant that in a month the USSR produced more steel and oil than tsarist Russia did in the whole of 1913. As regards electricity, the Soviet Union generated as much in three days as was generated in pre-revolutionary Russia in a year. Such were the rates of growth in the USSR at the final stage of socialist construction. Such was the might of the Soviet working class on the eve of the Twenty-First Congress of the CPSU which proclaimed the complete and final victory of socialism in the Soviet Union.

THE CONTEMPORARY STAGE OF COMMUNIST CONSTRUCTION (1959-1971)

Transition to the Creation of the Material and Technical Basis of Communism

The Twenty-First Extraordinary Congress of the CPSU was held in Moscow from January 27 to February 5, 1959. It was attended by 1,370 delegates and also by delegations from Communist and Workers' Parties from 72 countries. The supreme forum of the Communists of the Soviet Union was a major political event in the life of the country and the world working-class movement. Its materials and decisions touched upon the most vital aspects of social development.

The Congress was convened to consider the draft of a long-term economic development plan. The idea of launching a new plan arose in the course of the verification and revision of the targets of the Sixth Five-Year Plan for 1956-60 whose last two years and the next (seventh) five-year plan were combined into a single Seven-Year Plan for 1959-65. Besides verifying the control figures, the Party theoretically estimated the significance of the new stage in the life of the country. In this connection in the report on the draft control figures submitted for approval by the Congress, the seven-year programme was presented against the background of results of the preceding period and future prospects.

Summing up the achievements of Soviet society in the period following the October Socialist Revolution, the Congress arrived at the important conclusion that socialism in

the USSR had triumphed finally and completely. This conclusion was built on the following facts: the transformation of the entire social system, the emergence of socialism outside the boundaries of one country, that is, the liquidation of capitalist encirclement and the gigantic growth of the Soviet Union's might.

This thesis cannot be interpreted in a simplified way: that the final victory of socialism is unquestionable and no efforts will be required either in the present or in the future to safeguard it. Ideological opponents tried to cast doubt on the correctness of the Congress's conclusion by referring to some socialist countries where internal developments represented a serious threat to socialism. In this connection the Central Committee of the CPSU thought it necessary to elaborate on this thesis. This was done in 1968 by General Secretary of the CC CPSU Leonid Brezhnev, who said: "Experience shows that the victory of the socialist system in one country or another can in the present conditions be considered as final and a capitalist restoration precluded only if the Communist Party, being the leading force in society, firmly pursues the Marxist-Leninist policy in developing all spheres of social life; only if the Party untiringly strengthens the country's defences and safeguards its revolutionary gains, if it maintains vigilance and teaches the people vigilance towards the class enemy, an irreconcilability towards bourgeois ideology; only if it observes as sacred the principle of socialist internationalism, and strengthens unity and fraternal solidarity with the other socialist countries."¹

The thesis about the complete and final victory of socialism formed the basis of a no less important conclusion about the essence of the period which started at the close of the fifties: "...Due to the victory of socialism, the Soviet Union has entered the new historical period of the gradual transition from socialism to communism."² Focussing attention on the long-term tasks, the Congress underlined that the Seven-Year Plan was an important milestone in the life of

¹ L. I. Brezhnev, *Following Lenin's Course* (Speeches and Articles), Moscow, 1972, pp. 145-46.

² *The Twenty-First Extraordinary Congress of the CPSU, Verbatim Report*, Vol. II, Moscow, p. 548 (in Russian).

the Soviet Union in the period of full-scale construction of communist society.

This period is characterised by two forms of ownership (state and co-operative) and not one form of public ownership; distribution according to labour and not according to needs, the existence of two friendly classes and not a classless society. Consequently, the real content of the contemporary period is determined by a system of objective regularities of socialism.

Calling it a period of full-scale communist construction, the Party had in view the following: first, absence of a sharp distinction between socialism and communism, as the lower and higher stages of a communist formation; second, the fact that a constant perfection of developed socialism creates a direct prerequisite for the creation of communist society.

The Congress paid particular attention to Marx's and Lenin's conclusion that there must be two phases of communist society and that consequently attempts to jump from capitalism into communism, bypassing socialism, were utopian.

The Party closely linked the solution of major theoretical problems with determining the major practical tasks of the period of the gradual transition from socialism to communism. The Congress underlined that "the main tasks of the period will be the creation of the material and technical basis of communism, the further strengthening of our country's economic and defensive might and simultaneously fuller satisfaction of the mounting material and spiritual needs of the Soviet people."¹

The Twenty-Second Congress of the CPSU was another step forward in the theory and practice of communist construction in the Soviet Union. Preparations for the Congress were conducted over a considerable period of time. At its Plenary Meeting in January 1961, the CC CPSU approved the Congress agenda, and another Plenary Meeting held in June the same year discussed reports on the Party's programme and rules. The drafts of these fundamental Party documents were published for nation-wide discussion. This

¹ *The Twenty-First Extraordinary Congress of the CPSU, Verbatim Report*, Vol. II, p. 456.

was proof of the indivisibility of the interests of the Party and people and the genuinely popular character of the Party's line.

The Congress sat in Moscow from October 17 to 31, 1961. It was attended by about 4,800 delegates and by delegations from 80 Communist and Workers' Parties from other countries.

In effect the Twenty-Second Congress reviewed not only the period separating it from the Twenty-First Congress, but also the entire period of the Party's struggle for communism, beginning with the establishment of Soviet power. This had to be done because the Congress had to approve a new Party programme and its discussion was the focal point of the agenda.

In adopting the first programme at its Second Congress in 1903 the Russian Social-Democratic Labour Party called on the working class and all the working people of Russia to fight for the overthrow of tsarism and then of the bourgeois system and for the establishment of the dictatorship of the proletariat. It was a programme of preparation for and the accomplishment of a socialist revolution. It was accomplished in October 1917 and the world's first socialist state came into being.

In its second programme adopted in 1919 at its Eighth Congress, the Russian Communist Party (Bolsheviks) set the task of building socialism in the Soviet Union. Treading on unexplored ground, overcoming difficulties and hardships and constantly feeling the pressure of capitalist encirclement, the Soviet people under the leadership of the Party carried out the most profound socialist changes. Socialism transcended the bounds of one country after the Second World War and the Soviet Union made further progress in socialist construction. Socialism triumphed in the Soviet Union completely and finally.

The enormous experience accumulated by the Party as it carried out socialist changes in the country and also in connection with the further development of the world revolutionary movement was scientifically expounded in Lenin's works, in the decisions of the Party's Congresses and the Plenary Meetings of its Central Committee.

The third programme was formulated on the basis of a

theoretical generalisation of the experience of socialist development.

"Communism," states the CPSU Programme, "is a classless social system with one form of public ownership of the means of production and full social equality of all members of society; under it the all-round development of people will be accompanied by the growth of the productive forces through continuous progress in science and technology; all the springs of public wealth will flow more abundantly, and the great principle 'From each according to his ability, to each according to his needs' will be implemented. Communism is a highly organised society of free, socially conscious working people in which public self-government will be established, a society in which labour for the good of society will become the prime vital requirement of everyone, a necessity recognised by one and all, and the ability of each person will be employed to the greatest benefit of the people."¹

It was the world's first programme of communist construction and embraced a large number of problems ranging from an historic substantiation of the inevitability of capitalism's doom and the consolidation of socialism to outlining a plan for the construction of communist society envisaging the solution of three interconnected issues: the creation of the material and technical basis of communism, development of communist social relations and the communist education of people.

The Programme is permeated with scientific historicism which takes the past into account and also looks into the future. It stems from the Marxist-Leninist tenet that criteria of communism are enriched and concretised at each historic stage of the struggle for communism, while the importance and sequence of the practical issues awaiting their solution change in keeping with the problems advanced by life.

Creatively developing Lenin's formula "Communism is Soviet power plus the electrification of the whole country", the Programme states: "The main economic task of the Party

¹ *The Road to Communism*, Moscow, p. 509.

and the Soviet people is to create *the material and technical basis of communism*...¹ The Programme fixed the main criteria and components of this basis: the complete electrification of the country, comprehensive mechanisation and automation of production, widespread use of chemistry in the national economy, vigorous development of new types of energy and materials and organic fusion of science and production.

At the same time the Programme stressed that these criteria were not absolute, for the "material and technical basis will develop and improve continuously together with the evolution of society towards the complete triumph of communism".²

While giving priority to the creation of the material basis of communism, the Programme determined the tasks in the development of the political organisation of the Soviet society and its social structure, national relations, cultural growth and other fields.

The CPSU Programme gave a profound interpretation of the most crucial problems of human development. It viewed the tasks of communist construction in the USSR in direct connection with contemporary world development and has become a great ideological document of international significance.

Thus, at the end of fifties and the beginning of the sixties the Soviet people launched the creation of the material and technical basis of communism, and the Seven-Year Plan adopted at the Twenty-First Congress early in 1959 was the first step in this direction. The working class was assigned the decisive role in the fulfilment of the plan and it was only natural that its representatives should have been particularly active in drawing up and approving the tasks for 1959-65, which were discussed by all workers' collectives. At the Congress itself 86 people took part in the debates on the report on the plan's control figures. The speakers were not only Party, state and public functionaries, but also workers, including the Donets Basin miner N. Y. Mamai, Leningrad fitter V. I. Gorbunov, Gorky steelmaker

¹ *The Road to Communism*, Moscow, p. 513.

² *Ibid.*, p. 514.

N. I. Anishchenkov, a worker at the Minsk Automobile Factory D. I. Barashkin and farm-machine operator A. V. Gitalov. The Congress received thousands of letters and telegrams containing concrete proposals. Many of the control figures considered at the Congress were concretised and their adoption showed that the Party's policy was a concentrated expression of the interests of the whole people.

As in the preceding plans, decisive importance in the Seven-Year Plan was attached to strengthening the country's industrial potential. Industrial output was to increase 80 per cent from 1958 to 1965. To get a better idea of what this meant let us recall that on the eve of the Seven-Year Plan the Soviet Union produced approximately a fifth of the world industrial output and ranked second after the USA for volume of output. At the time the population of the USSR was seven per cent of the world total.

The figures illustrating the tremendous scope of construction and the growing capacities of all branches of industry stirred even the Soviet people who were accustomed to their country's rapid economic growth. There is no need to list all the figures of the new plan, though each was important in itself. Particularly significant were the qualitative changes which were to take place in the economy between 1959 and 1965. For example, a basic change was envisaged in the fuel balance: for the first time oil and gas were to move to first place and their share in the fuel production was to rise from 31 to 51 per cent. The share of coal decreased accordingly, though its output increased.

In the power industry priority was given to the construction of thermal stations working on coal, gas, shale and oil. At the same time the building of hydroelectric stations on the Volga, Dnieper, Yenisei, Angara and other major rivers continued.

The chemical industry was to be given a further great boost. In the past it also developed at a rapid rate, but now it was planned to channel five times more funds into it than during the past seven years. It developed much faster than any other branch of industry in order to supply agriculture with the necessary quantities of mineral fertiliser, pesticides and weed killers and to increase the output of synthetic

goods, plastics and synthetic rubber from 10 to 12 times.

The machine builders were set the task of accelerating technological progress in the economy by providing it with the most sophisticated equipment, computers, automatic and electronic devices. A genuine technical revolution took place on the railways where steam locomotives were being replaced by electric and diesel locomotives. In the building industry the stress was on the mechanisation of labour, introduction of industrial methods and wide application of precast concrete. It was also envisaged to complete the electrification of collective and state farms.

The scope and scale of the tasks were unprecedented. In combination with measures to achieve a further growth of agricultural production and to raise the level of science and culture this fact created favourable conditions for boosting the productive forces and enhancing the country's defensive capability and achieving the greatest ever improvement in living standards. Such objectives had been set in the past, too, but now, when socialism has triumphed completely and finally in the USSR, the advantages of the new method of production could be used with much greater effect. In the course of seven years (1959-65) it was planned to shorten the working week, raise real incomes in town and country, carry out the world's greatest house-building programme, further improve the pension system and introduce a number of other social measures.

The Seven-Year Economic Development Plan fully reflected the needs of the Soviet economy and its possibilities. The best proof of this was the creative activity of the masses both in the course of the discussion of the control figures and throughout the seven-year period.

The Start of the Communist Labour Movement

The report about the convocation of the Twenty-First Party Congress was published in the press in the autumn of 1958. Shortly afterwards, in keeping with tradition, the foremost workers' collectives joined the pre-Congress competition. The Communists and Komsomol members of one of the shops of the Moscow Marshalling Yard decided to assume additional production undertakings. At a meeting on October 11, 1958,

foreman V. Stanilevich posed the question: "What new elements should be introduced into the competition to accelerate the building of communism?"

The same question was discussed in September 1958 in the Central Committee of the Komsomol. Analysing the experience of the socialist competition and the new features which appeared in it of late, it was decided to mark the opening of the Congress with the formation of communist labour teams. But what qualities should such a team possess to make it different from others? The best answer to the question came from the workers of the Moscow Marshalling Yard: they proposed that in order to win the title of Communist Labour Team its members not only had to fulfil the plan, which was always the principal criteria in the competition, but also to raise their cultural and technical level, participate in public activity and behave in a model way in social and private life. Such were the three pledges, three commandments of the participants in the competition whose motto became "Learn How to Work and Live the Communist Way". At many enterprises workers were thinking about extending the traditional competition undertakings and many collectives had already done so. Therefore, the slogan of the workers of the Moscow Marshalling Yard was met with approval by the foremost metalworkers in Leningrad, building workers in Minsk, oil workers in Baku and the miners of the Donets Basin.

An article about the birth of the new movement appeared in the *Komsomolskaya Pravda* on November 18, 1958. The initiative of the young railwaymen was a clear-cut expression of the thoughts and aspirations of their generation. The commandments of the movement's initiators most fully embodied the thoughts of hundreds and thousands of innovators of production who realised that the establishment of a communist economy, the development of social relations and the moulding of a new man were interconnected processes. The slogan of the day was: "Let's Form Communist Labour Teams."

Born on the crest of the wave of the pre-Congress socialist competition, the movement embraced all parts of the country, all towns and villages, industry and agriculture, building and transport.

Workers who were not united in teams due to the different character of their work also wanted to join the communist labour movement. A. Rybov, a skilled turner who employed high-speed methods, said: "We tried to form a team competing for the title of Communist Labour Team in our department, but nothing came of it. When we got together and studied the commandments we realised that owing to the nature of our work we would be unable to form such a team artificially. Things would have been different if we all worked as a team." Many workers who worked on individual orders searched for a way which would enable them to take part in the movement.

The Komsomol members at the Admiralteisky Works in Leningrad decided to compete for the title of "Young Front-Ranker of Communist Labour". At about the same time the workers of a clothes factory in Tiraspol launched a similar competition. In Sverdlovsk the workers inaugurated an individual competition and proposed that the winners should be honoured with the title "Excellent Communist Labour Worker". There were many proposals. But the formula put forward by the young workers of the Donets Basin Engineering Works "Shock-Worker of Communist Labour" was approved by the majority as one most fully embodying the aspirations of the people.

The first to win the title were workers who made the best showing in the course of the Seven-Year Plan period. In Tiraspol it was awarded to V. F. Yudakova, a worker at the local clothes factory and Deputy to the Supreme Soviet of the Moldavian SSR. For ten years in succession she worked without defects, overfulfilling the daily quota by 100-200 per cent. In the Urals Area the title was awarded to a boring lathe operator, a student at the evening department of a vocational school, V. Ostatochnikov, who coped with the assignment of the first 12 months of the Seven-Year Plan in three months. In Odessa one of the first to win the title was G. Nenevenko, a turner who by 1960 was already fulfilling the 1965 plan. At the Urals Railway Carriage Works the title was won by turner V. Lyantsev who fulfilled four yearly work quotas in 1959, advanced 18 rationalisation proposals which were put into effect and trained ten young workers. There were thousands of other front-rank workers

whose splendid achievements were an example to the broad masses of the working people.

Shortly, not only teams, but shops, sectors, shifts and even whole enterprises joined the competition for the honorary title of communist labour collectives.

The mass scale of the movement reflected the general rise in the cultural and technical level of the working people, their high political consciousness. These were not new factors in the labour of the Soviet people: they existed in the period of the communist *subbotniks* which were first held in 1919, at the end of the twenties and the beginning of the thirties when the socialist competition embraced millions of people and in the period of the innovators' movement inaugurated by the Donets Basin miner A. Stakhanov in 1935. Each of these stages helped to establish and develop a new attitude to labour. Never before, however, had the movement involved such a vast number of people. And, of course, there were specific reasons for this.

At the end of the fifties, on the eve of the Seven-Year Plan, when socialism had fully triumphed in the USSR, industrial workers and employees comprised 66 per cent of all the working people in the country. Almost 20 million people, as against 10.9 million in 1940, were employed in industry, the most advanced and organised branch of the economy. Of them over 40 per cent had a service record of more than ten years. Nearly 39 per cent of the workers, or five times as many as at the end of the thirties, had at least seven years in a secondary school.

There are documents showing the general trends characteristic of the period of the first five-year economic development plans. Here are a few lines from the autobiography of Motya Kirillova, a Mordovian woman who took part in building and commissioning the Stalingrad Tractor Plant: "When I arrived I was given odd jobs to do. At the same time I entered a factory apprenticeship school to acquire the occupation of a fitter. There I studied everything: geometry, technology and machine building. I had never seen a tractor in my life but when I heard that those people who would not pass the examinations would be sent home I began to study at nights. Others would go for walks on the bank of the Volga, but I studied and passed the exams."

This was a typical biography of a worker of that period. The workers studied and worked, mastered technology and tested new machines and successfully built socialism.

Here is what engineer Herman Lamochkin said about himself as he gave his biographical particulars: "Nothing could be simpler: I was born in 1935. I did not participate in any wars, nor was I ever a partisan. I finished a seven-year school and served in the Army. Completing my term of service I got a job at a building site and entered the evening department of an institute. I was a Komsomol member and then became a Communist." It is typical that his life, like that of most people of his age, should be so unlike the life road of Motya Kirillova.

The mass entry of the workers into the Party on the eve of the Seven-Year Plan strikingly demonstrated their political maturity. Between 1956 and 1958, the number of Communists increased by one million. In the major industrial centres workers comprised from 50 to 67 per cent of the newly accepted members. By January 1, 1959, there were 8,000,000 Komsomol members working in industry.

Sociological surveys conducted in 1959 and 1960 showed that everywhere it were the workers and Communists and Komsomol members in the first place, who initiated and organised the competition of Communist Labour Teams and shock-workers. In Moscow 43 per cent of the members of the Communist Labour Teams were Communists and Komsomol members and about 59 per cent of the workers had either a seven-year or secondary education; the corresponding figures for the teams in Leningrad were 62 and 71 per cent. The situation was the same in Kharkov, Tashkent, the Urals Area and elsewhere. The initiators are worthy of praise not only because they worked well, studied and were active in public life, but because they set an example to millions of people.

Another splendid initiative marked the beginning of the Seven-Year Plan. It was put forward by Valentina Gaganova. She was 16 when she first came to the Vyshny Volochok Textile Mill. Her father was killed in the Second World War and she helped her mother bring up three younger brothers and sisters. Valentina finished a seven-year school, joined the Komsomol, became a skilled weaver and head of

the team, which subsequently became one of the best at the mill.

There was a team in her shop which systematically failed to cope with the plan. Seeing that ordinary advice on her part had little effect she decided that she could help it only if she joined it. Her move surprised some people, for it meant a drop in her wages. But socialist emulation is effective precisely because the foremost workers come to the assistance of those lagging behind and pass on their experience not for selfish reasons, but solely for the benefit of the common cause. It was not easy for Gaganova but thanks to her efforts the once backward team achieved high production results and won the title of Communist Labour Team. The factory newspaper was the first to report the news and then Valentina Gaganova's name appeared on the pages of Vyshny Volochok newspapers and in the central newspapers. Thousands of workers followed her example. In 1959, Valentina Gaganova was made Hero of Socialist Labour and her initiative became a part of the movement for communist labour.

The First All-Union Conference of the Foremost Participants in the Emulation of Communist Labour Teams and Shock-Workers was convened in Moscow in May 1960. Its delegates represented an army of over five million participants in the new movement, and a mere 18 months passed after the country had learned the names of its initiators. Gradually, the initiative of the innovators, who were called the "scouts of the future", developed into a genuinely nation-wide movement. The new competition derived its attractive force from the fact that it enriched the life of the people both at work and at home.

Let us glance at a diary, now a museum exhibit, kept by M. A. Marinenkova, a Communist Labour team leader at the Trekhgornaya Manufaktura Textile Mill in Moscow. Here are a few short entries made in 1960.

"January 12. Summed up the results of the competition for 1959... We fulfilled our undertakings and produced about three tons of yarn in excess of plan; 99.8 per cent was of first class quality. Fresh undertakings.

"January 13. All members of the team and the foreman were at my housewarming and gave me a chandelier. We

had a fine time although we had just completed our night shift.

"January 15. Zoya Semenova spoke of her impressions of Leningrad. The whole team went to the cinema to see *Lenin in October*.

"January 27. There was a meeting with Paul Robeson in our House of Culture. Valya Yurlova, one of our team, greeted the singer.

"February 2. A great day. For the first time we worked seven hours, an hour less, and manufactured 14 kilos more output.

"February 9. Agitator Savushkin delivered an interesting report on the situation in France.

"February 17. D. P. Smirnova returned from Vyshny Volochok where she spoke to Valentina Gaganova. She told us many interesting things. Saw the play *The Irkutsk Story* at the Mayakovsky Theatre.

"March 8. Just a year ago today we began servicing 1,600 spindles instead of 1,280. During lunch break we recalled the difficulties which had to be overcome and firmly decided that in the following year we would attain the highest productivity of labour in the country."

The number of collectives which seriously intended to live and work according to the principle "one for all and all for one" steadily increased. In 1965, the communist labour movement embraced 35 million people. Naturally things did not always go smoothly and easily, for it was a question of establishment and development of a new form of the creative activity of the masses on a gigantic scale. But it was this movement, which was organically connected with the cultivation of the communist attitude to labour and the general rise of the population's cultural and technical level that played an important role in the Soviet people's efforts to fulfil the Seven-Year Plan.

The Efforts of the Working Class to Fulfil the Seven-Year Plan

On January 2, 1959, shortly before the Twenty-First Congress of the CPSU convened to consider and approve the control figures for the Seven-Year Economic Development Plan for 1959-1965, an automatic space station which became the first artificial planet of the solar system was launched

in the Soviet Union. In the opinion of the world public this accomplishment reflected the general successes of Soviet science and technology resulting from the growth of the country's industrial potential. Industry developed at a particularly rapid rate in the first three years (1959-61). The planned assignments were surpassed and the average annual increment of production reached ten per cent instead of 8.3 per cent.

The press and radio carried daily reports about the construction of giant hydroelectric power stations on the Volga and the Angara, the building of oil and gas pipelines extending across the entire country, the electrification of the railway from Moscow to Lake Baikal, the building of giant convertors and blast furnaces and chemical and ore-dressing factories. All of them were unique projects.

In the middle of June of 1959, the builders of the Bratsk Hydroelectric Station blocked the swift Angara in a mere 19 hours. By way of contrast let us recall that it took several days to block the Irtysh in 1950. The achievement on the Angara was due not only to more modern equipment which was available in much greater quantities, but also to the greatly improved organisation of work. The Stalingrad Hydroelectric Power Station was put in operation a year ahead of schedule. The world's biggest at the time, the station attained its rated capacity in December 1960 thanks to the correct placing of personnel, concentration of means and timely delivery of the units and all the necessary materials plus, of course, the experience and the enthusiasm of the builders. In 1961, the first four units of the still larger Bratsk Hydroelectric Power Station, began generating electricity.

The use of precast concrete in the building of the Kremenchug Hydroelectric Power Station, which attained full capacity in 1961, also yielded excellent results. For the first time 12 units were assembled in a mere 11 months. The extensive use of advanced methods made it possible in 1962 to use precast concrete to build 75 out of 112 large thermal power stations, as compared with six in 1959.

It should be noted that such broad utilisation of new constructions was impossible in the past. It was necessary to build up a precast concrete industry whose output rose from

5.3 million cubic metres in 1955 to nearly 40 million cubic metres in 1961. The employment of precast large panels in building work made rapid headway.

There is a building in Moscow which is scarcely noticed by passersby, but which is often visited by thousands of Soviet and foreign specialists. It houses the Central Control Panel of the Integrated Power Grid of the European Part of the USSR whose construction was launched in 1956. On the wall in front of the engineers there is a huge plan of the grid with numerous labels, white, yellow and red threads and hundreds of lamps indicating the location of the electric stations, the power grids of various regions, powerful transformers, and so forth. The most sophisticated equipment, automatic and electronic devices give a complete picture of the power grid and the work of the mechanisms at the power stations in Kuibyshev, Sverdlovsk, Gorky and Bashkiria. In 1959, already 17 power systems each consisting of dozens of hydraulic and thermal stations, were united into a single system and by 1965, another 30 were added to their number.

The unique Volgograd-Moscow 500,000-volt high-tension transmission line extending for 1,157 kilometres became operational in December 1959. And new lights and illuminated threads appeared on the plan of the Central Control Panel. In 1961, the capacities of the Integrated Power Grid increased considerably following the commissioning in September of the Volga Hydroelectric Power Station named after the Twenty-Second CPSU Congress. The Kuibyshev Hydroelectric Power Station (now the Lenin Volga Hydroelectric Power Station) was the largest in the world for less than three years. In 1961, a still larger one was completed.

The iron and steel workers went off to a good start in the Seven-Year Plan. From 1959 to 1961, investments into this field of production increased by more than 1.7 times compared with the period from 1956 to 1958 to meet the enormous demand for steel, pig iron and rolled metal. The shortage of metal was largely due to the fact that the construction of blast and open-hearth furnaces and rolling mills fell short of the number envisaged in the Fourth, Fifth and the first years of the Sixth Five-Year plans. Urgent steps were taken to remedy the situation. The Komsomol proclaimed the construction of new major metallurgical enter-

prises shock-work projects and organised a competition for their speediest completion. The first blast furnace to be completed in the course of the Seven-Year Plan was put in operation 41 days ahead of schedule on August 20, 1959.

The building of a major metallurgical plant in Kazakhstan proceeded at a rapid pace. Here, in Temir-Tau, one of the biggest coke furnace batteries was put in operation in 1960. A unique sheet mill was commissioned at the Magnitogorsk Works. Many other projects which embodied the latest scientific and technological achievements were put in operation in Cherepovets, at the Novotula and Novolipetsk works and in the Urals Area. In 1960 and 1961, blast furnaces with a capacity of 2,000 cubic metres were built. The building and the commissioning of powerful blast and open-hearth furnaces, rolling mills speeded up the concentration of production, facilitated the introduction of advanced technology, automation connected with the utilisation of natural gas, oxygen, super-high pressures, and so forth.

The policy of accelerating technical progress demanded that the engineering industry, which supplied the economy with the necessary equipment, substantially renovated its production capacities.

In view of the new conditions it was necessary not only to hasten the building of factories, but also to modernise the existing equipment. In fact, modernisation, in varying degrees embraced all branches of industry, thus giving workers, engineers, technicians and scientists ample opportunities to display their creative abilities.

On the whole, the efforts to hasten technological progress proved effective. Electric and diesel locomotives, the new TU, IL and AN airliners, precast concrete and large-panel structures, and synthetic goods were rapidly coming into their own.

The Soviet television network regularly broadcast programmes from foreign countries and the march-past on Red Square on May 1, 1960 was televised to the whole of Europe.

April 12, 1961, the day Yuri Gagarin performed the first manned space flight inaugurating the era of the exploration of the universe has become a landmark in the history of mankind. Herman Titov, Cosmonaut No. 2, made his

space flight on August 6. The conquest of space inaugurated by the launching of the first Soviet sputnik in 1957 gained momentum. The world public connected these outstanding achievements directly with the general progress of science and technology in the USSR. The successful space flights were prepared in laboratories and factories, at construction sites and proving stands. Indeed, they symbolised the general upsurge in industry.

At the time the USSR was preparing for the Twenty-Second CPSU Congress, and, in keeping with traditions, a pre-Congress competition unfolded at industrial enterprises. The foremost collectives undertook to fulfil the annual targets by the time the Congress convened, and some promised to fulfil the seven-year plan by that date. Following the example of the Muscovites, workers throughout the country competed in fulfilling their individual pledges, that is in manufacturing more output to mark the opening of the Congress.

In the autumn of 1961, K. K. Masly's team of workers was turning out production scheduled for 1967. In other words they fulfilled not only the 1961 plan but also the plan for the period from 1962 to 1966. The weavers at the Trekhgornaya Manufaktura Textile Mill raised their labour productivity to a level which they were to have attained at the end of the Seven-Year Plan period. The masses of workers followed their foremost representatives, thus giving the country tons and metres of above-plan output, millions of additional rubles and in general augmented the Soviet Union's might.

In 1961, the Soviet Union was ahead of the USA in the production of iron ore and coal, the manufacture of precast concrete structures, main-line diesel and electric locomotives, woollen fabrics, sugar, animal fats and a range of other items. In the gross volume of production the USSR surpassed such advanced states as Britain, France, Italy, Belgium, the Netherlands, Canada and Japan taken together, and whose aggregate population exceeded by 60 million the population of the Soviet Union.

As a result of the achievements of the Soviet working class scored in close co-operation with the scientists, the Armed Forces safeguarding the interests of the people

received intercontinental ballistic missiles with a range of over 12,000 kilometres, anti-aircraft missiles, missiles for land and air forces, a fleet of atomic-power submarines equipped with ballistic and homing missiles.

On the whole, in the first years of the Seven-Year Plan period the national income increased at a faster rate than planned. It was, therefore, decided to channel additional large funds into the development of textile and footwear industries and their raw materials and machine-building base. The output of certain types of products rose so rapidly that in 1960 the State Planning Committee of the USSR approved a list of over a thousand items whose above-plan output was strictly limited. With the abolition of the shortage of commodities priority was given to improving their quality.

The Soviet people came towards the Twenty-Second Congress with great achievements to their credit. After the Congress the country intensified its efforts to build up the material and technical basis of communism.

In October 1961, the Congress delegates returned to their respective factories, construction sites, collective farms, research institutes, Party and government organisations, military units and educational institutions... A fresh creative upsurge swept through the country. S. A. Antonov, a delegate to the Congress, must have realised it as soon as he returned to his Vladimir Ilyich Works. The enterprise had a fine tradition: miniature beacons were set up on the work benches of the innovators. Made at the works, these beacons were lit only when the work quota was overfulfilled. A special commission daily checked the results of the competition and only it was authorised either to turn on or turn off the beacons.

When Antonov returned he saw that the number of beacons increased considerably during his absence. The workers responded to the inspiring decisions of the Twenty-Second Party Congress by pledging to attain the world's highest level of labour productivity at each work bench. Thus, they clearly and concisely set themselves the immediate task of the Seven-Year Plan, of the Party Programme and their bold initiative expressed the wishes and aspirations of millions of other people.

In 1962, blast furnace operators in Magnitogorsk surpassed the level of labour productivity at the foremost enterprises in the USA by 1.5 times. A team of Donets Basin miners at the Privolnyanskaya Yuzhnaya Pit set a world record by producing 80,039 tons of coal in a month. In Tataria oil workers under foreman Valeyev produced 40,000 tons of oil per each member of the team and thus exceeded the control figures for the last year of the Seven-Year Plan by almost four times.

But perhaps the most important quality of the foremost innovators was not their ability to set production records, but to maintain a high level of labour productivity and to pass on their experience to other workers. In the summer of 1963, I. Bridko, N. Mamai, K. Severinov and P. Sinyagovsky, all veteran Donets Basin miners, posed the following question to the young people through the press: "Who are you? An individual record breaker or a hero leading the masses?"

In effect, this was a continuation of the discussion concerning the honour of a Soviet worker which was started in the press by a Leningrad milling-machine operator I. Leonov. Why were there still a large number of workers who were unable to fulfil the plan? What had yet to be done to make every worker feel himself a part of his collective? These were serious questions.

On the one hand, the Soviet industry had adequately experienced workers firmly attached to their enterprises. By the summer of 1963, an estimated 55.5 per cent of them had a continuous service record of not less than five years and consequently did not change their place of work in the course of the Seven-Year Plan period. In the transport and building industries the percentage of such workers was 57.8 per cent and 40.5 per cent respectively. On the other hand, there were certain shortcomings which more and more impeded the rational use of labour resources with the view to creating permanent cadres.

In the first years of the Seven-Year Plan approximately one out of every eight or nine workers did not fulfil his work quota. Against the background of these figures the results of the front-rank workers acquired particular significance. In those years, too, while piece-rate industrial workers on

an average overfulfilled their quotas by 19-21 per cent, more than a third of the workers overfulfilled their quotas by 20-50 per cent.

Naturally, the appeal of Leonov, Bridko, Mamai and other veterans could not directly eradicate the shortcomings, all the more so, since the complete elimination of some of them depended on the general improvement in the organisation of labour, considerable enhancement of the role played by material incentives, and so forth. At the same time, however, there remained the moral factor in the development of production. The best proof of this was the enthusiasm displayed by broad sections of the working class in fulfilling the decisions of the Communist Party.

Shortly after the Twenty-Second Congress Bukhara became the first town in the country where gas wholly replaced coal and mazut as fuel. The first fully automated oil field in the country was commissioned in the Tatar Autonomous Republic. In the summer of 1962, the first section of the Mikhailovsky Iron-Ore Combine (Kursk Magnetic Anomaly) with an annual capacity of 2.5 million tons of ore was put in operation. In this period, too, Moldavia began to manufacture her first tractors.

During the Seven-Year Plan period the building and commissioning of great production capacities became a matter of everyday life. The most important projects in the sixties were the Bukhara-Urals Gas Pipeline, which brings Central Asian gas to the Urals industry more than two thousand kilometres away, and the Druzhba Oil Pipeline. It begins on the banks of the Volga and running westward crosses the Soviet border, branches off to Poland and the GDR and to Czechoslovakia and Hungary. Extending for 5,500 kilometres it is the world's longest. The power economy of Siberia continued to develop successfully.

It took a mere three years to install all the units of the Bratsk Hydroelectric Power Station on the Angara, and at the beginning of 1964 it became the world's biggest. In the meantime a still bigger hydroelectric power scheme was going up on the Yenisei. In January 1963, a new town called Divnogorsk, appeared on the map of the country. Five years earlier it simply did not exist and when Gennady Kuritsyn, one of its builders, brought his family along, the first family

in the town's history, there were no dwelling houses. But by the beginning of 1963, the town already had 100,000 square metres of housing and the builders of the hydroelectric power project on the Yenisei celebrated over a thousand weddings and registered approximately 1,800 births.

The average age of the inhabitants of Divnogorsk is 24. But do not think that they have just become builders. Most of them arrived from the Volgograd, Bukhtarma, Irkutsk, Bratsk and other hydroelectric power schemes.

When work was started on the dam across the Yenisei at Divnogorsk, the builders painted the words "Surrender, Yenisei" on the first rock that was cast into the river. On March 25, 1963, Communist Leonid Nazimko pulled up his 25-ton tip-up lorry at a breach in the dam. A huge concrete block on which the workers inscribed "A great day among great days, today we vanquished the Yenisei" hurtled into the water.

In keeping with the plan, oil production increased at a rapid rate. The first Siberian oil fields were commissioned. In March 1962, a great fountain of oil gushed forth on the bank of the Lena River near the taiga village of Markovo. The world's oldest oil which was locked up in its underground vaults burst forth with tremendous force. And it so happened that the birthday of Markovo oil proved to be the last day in the life of one of the people who discovered it. Vitaly Yefimenko died in the fight to curb the gusher displaying no less courage than during the war in which he served in the tank forces. A tugboat and a street have been named in his honour in the new town of Nefitelensk. It has been estimated that Western Siberian oil deposits are richer than all the formerly discovered resources in the country.

The accelerated production of oil and gas largely improved the country's fuel balance and created more favourable conditions for using oil and gas to hasten the building of a powerful chemical industry.

Special mention should be made of the trends which appeared in the economics of production in the period following the Twenty-Second Congress. An analysis of what had been achieved between 1959 and 1961 indicated the need for more effective use of the equipment, the latest tech-

niques and technology. Leading newspapers and magazines devoted special columns to problems connected with the economics of individual enterprises and the country as a whole.

The growing attention to economics had a specific impact on the organisation of socialist emulation: ever more often priority was given to pledges to improve economic indices, that is, cut production costs, modernise the equipment and rationalise production.

In 1964, fifteen factories in Moscow proposed to launch a competition for the profitability of each item they produced. With their experience of working without loss, they simultaneously pledged to improve the quality of their output.

In other words, just as in the period from 1959 to 1961, the reports of the Central Statistical Board, the reports of the winners of the socialist competition and the general economic progress between 1962 and 1964 attested to the rapid development of the economy as a whole. But in the years following 1961 the rate of development fell below the control figures fixed at the start of the Seven-Year Plan.

These shortcomings came to light when the question of bringing the achieved level of development of the productive forces in conformity with the system of economic management had to be urgently solved. While the country's industrial potential increased to unprecedented proportions, the basic methods of planning, price formation and material stimulation in effect remained the same as in the period of the pre-war five-year plans.

The required changes took place following the Plenary Meeting of the Party Central Committee in October 1964. The meeting expressed the Party's will and the will of the whole people to develop and strictly observe Lenin's principles of guiding the political and economic activity of the Soviet society. All manifestations of subjectivism in economic management were criticised and condemned.

At its session in December 1964, the Supreme Soviet of the USSR raised the urgent question of cardinally improving planning methods and enhancing the role of material incentives. Deputies argued in favour of introducing cost accounting and extending the independence of enterprises;

it was a question of correctly implementing the socialist principle of distribution according to work.

The whole country knew about the economic experiments which were conducted at the time on Government instructions. Some pits in the Lvov-Volyn Coal Basin and motor transport organisations in Moscow and Leningrad went over to new planning methods and introduced new forms of economic incentive. The first firms, or production associations, embracing several affiliated enterprises appeared as far back as 1962.

In the course of the establishment of branch associations the relations between the industry and the marketing organisations acquired a new content. In the summer of 1964, the sewing firms Bolshevichka in Moscow and Mayak in Gorky received permission to manufacture items ordered by shops. Their activity was assessed on the basis of two indicators: the fulfilment of the sales and profit plans.

In 1965, a good showing was made by those motor transport organisations in Moscow and Leningrad where the rights of the collectives were substantially extended, and the bonus system was introduced which largely increased the interests of the workers in the results of their labour. Empty runs and idle time were reduced and freight turnover increased. This gave the organisations considerable above-plan profits, which in response to the workers' wishes were expended on improving production, social and cultural needs and bonuses to the foremost workers. As at the other enterprises which took part in the economic experiment, the best workers additionally received from 40 to 50 per cent of their monthly wage.

Having analysed the results of the experiment the Party Central Committee at its Plenary Meeting in March 1965 drew up a concrete programme for the further development of agriculture, and at its Plenary Meeting in September that year it discussed the question of improving the methods and forms of industrial management.

Inaugurated in the autumn of 1965, the economic reform calls for a combination of the branch principle of administration with the territorial principle, with the interbranch problems of the comprehensive development of the economy, with the problems of boosting the economy in all regions of

the USSR and with the extension of the economic rights of the Union and autonomous republics. But this is only one aspect of the question. No less important is the need to modify planning methods, enhance the economic initiative of the enterprises and to apply the principle of material incentives with greater effect.

Lenin pointed out that each enterprise should be a paying one. Its income should be able to cover all its expenditures and ensure a profit. The economic reform creates favourable conditions for this. Naturally, even before the introduction of the reform measures were taken to raise labour productivity, prevent enterprises from operating at a loss, increase profits and augment public funds. But the cost accounting principle did not fully live up to expectations and the material incentives were by no means employed as they should have been in keeping with the socialist principle of distribution according to work and the opportunities inherent in the Soviet economy.

The new economic reform envisages the further development of the democratic principles of economic management and a considerable enhancement of the role of the masses in guiding production.

And although the former system of management and planning connected with the formation in 1957 of economic councils existed until 1965, the decision adopted in March and September in combination with the already effected measures had a very beneficial impact on the country's economy. The final efforts to fulfil the Seven-Year Plan were influenced by these decisions and the crucial indicators of the country's industrial growth improved in 1965.

As a result, the control figures determining the volume of gross output approved at the Twenty-First Congress were topped in the course of the Seven-Year Plan. It was the heavy industry, with engineering and metalworking enterprises as its nucleus, that overfulfilled the plans to the highest degree, a factor which played a decisive role in strengthening the economic and defence potential of the USSR.

During the Seven-Year Plan period the fixed production assets in industry more than doubled. The most rapid devel-

opment was registered by branches ensuring technological progress.

In 1965, the Soviet Union with a population of seven per cent of the world total turned out nearly 20 per cent of the world industrial output. It will be opportune to recall that in 1917 the Soviet Union turned out less than three per cent and in 1937 about ten per cent of the world industrial product.

The Growth of the Working Class

The country's rapid industrial development was accompanied by the growth of the urban population which in 1961 for the first time surpassed the number of rural inhabitants. The populations of Gorky, Novosibirsk, Tashkent, Baku and Kharkov surpassed the million mark which put them on the same plane as Moscow, Leningrad and Kiev. A total of 178 new towns were built, including Soligorsk in Byelorussia, Neringa in Lithuania, Tsimlyansk in Rostov Region and Shakhtinsk in Karaganda Region. Each new factory, each new town became yet another centre of modern industry, a bastion of the working class. Between 1959 and 1965, the number of industrial and office employees¹ increased from 56 million to 77 million, that is by 21 million, of whom 14 million were industrial workers. By the end of the Seven-Year Plan period, the share of workers and employees with their families in the total population of the country rose to 75 per cent which was another indicator of the enhancing role played by the working class in Soviet society.

Let us ask the Soviet working class to tell about itself in a set of questions related to two periods: the eve and conclusion of the Seven-Year Plan.

What is your numerical size? Not counting the employees there were 40 million of us. Now there are 54 million. In 1958, the industrial workers and office employees with their

¹ Very often Soviet statistics do not single out the number of industrial workers, but include it in the aggregate number of industrial workers and office employees. It should be noted that a considerable part of the office employees have much in common with the industrial workers, both as regards their social position, participation in production and social psychology.

families made up 68 per cent and in 1965, more than 75 per cent of the total population.

Where do you draw your reserves from? Fifty per cent from the families of workers and employees whose children graduate from secondary and vocational schools and find employment in industry; 33 per cent from the collective farm villages. Some former collective farmers became workers on state farms created on the basis of collective farms. The majority of this group, however, became urban dwellers who have finished schools or completed their term of military service. Is this a positive or a negative factor? It is a positive factor as regards the Caucasus, Central Asia and the Ukraine where there is enough labour power in agriculture. At the newly built automobile factory in Kutaisi three out of every four workers are of peasant origin. Things are more difficult in Siberia, in the non-black earth region of Russia, where the outflow of young people from the villages to towns makes the problem of labour power in the countryside a very serious one.

Who replenishes the ranks of the working class in the old industrial centres today? The practice of agreements with collective farms under which they directed surplus labour power into towns, a widespread practice in the thirties and forties has become a thing of the past. Agriculture is becoming mechanised to an ever greater degree, villages are being built and the countryside itself needs skilled workers. There are no longer workers' families with ten and even twelve children who from an early age went to work at their fathers' factories. Where do factory workers come from? Let us take a small metalworking factory in the Urals Area as an example. In 1965, it took on 429 persons, not counting engineers, office employees and those who got jobs in unproductive spheres such as the canteen, medical centre, and so forth. Sixteen of them were workers from other factories, 64 were graduates from vocational schools, 49 were demobilised soldiers and the others were boys and girls just out of school, or who had worked for two or three years somewhere else. From what social strata did they come? Three hundred and nineteen workers were the children of teachers, doctors, office employees and officers, 31 came from the families of engineers, factory office personnel,

scientific workers, 25 from the families of collective farmers (all demobilised soldiers), 67 were the children of workers (11 of them failed to pass entrance examinations to colleges or universities and therefore sought employment at the factory). It follows that workers' collectives draw the bulk of their replenishments from young men and women coming from various sections of the urban society. Sociologists have named this development social mobility. Unlike the capitalist countries, in the Soviet Union there are no barriers between classes and social strata.

Where do you work? The biggest contingent, nearly 23 million, works in industry. Eight million manufacture machines and metal goods, six million produce fabrics, clothes, footwear and foodstuffs, 4.5 million produce coal, ore, smelt steel, manufacture chemical products and building materials. There is a particularly rapid growth in the number of machine builders and chemical workers, while the number of workers employed at arduous jobs at timber-felling sites and mines is decreasing.

There are five million workers in the building industry and just as many in transport. The number of chauffeurs and people working in maritime transport is increasing at an especially rapid rate.

There is a working class in the countryside, too. In 1965, one out of every three agricultural workers was employed at state farms and state-run subsidiary farms (the rest were collective farmers) as against one out of every six in 1959. In 1966, one out of every eight workers and office employees worked in the countryside.

How many of you are women? Counting the office employees women make up 50 per cent of the working class. Women comprise an even greater percentage of the light and food industry workers and employees. But there are considerable differences between various branches and regions. At the Kharkov and Altai tractor plants women make up more than a half of the personnel; they comprise the majority (60 per cent) even among the lathe operators. At the automobile factories in Lvov and Kutaisi men make up almost 75 per cent of the personnel. The percentage of the women employed in the national economy increases from year to year. In 1940, they made up 39 per cent of the

workers and employees, in 1950—47 per cent and by 1966—50 per cent. This is a welcome development. More and more women are entering the sphere of social work thanks to the steady growth in the number of children's institutions, shops and communal services.

How old are you? There are no concrete estimates. But it is absolutely clear that the working class has grown younger. Surveys conducted at automobile and tractor factories showed that eight out of every 100 workers were under 19, 18 were from 20 to 25 years of age, 24 from 25 to 30, and only 50 per cent were 30 and over.

In the course of the Seven-Year Plan period veteran workers born between 1900 and 1910 who came to work at the factories in the years of industrialisation retired on pension. They were replaced by young people who came of age after the war. There were not many of them since the birthrate declined sharply during the war. But in 1966, two million young people with a secondary education entered the production sphere.

Out of every 100 young engineering workers (not older than 28 years of age), 58 worked for more than three years and 34 over five years. There are seven Komsomol members and one Communist per every ten of the young workers. Taking into account that a half of them have a complete secondary or specialised education and only four out of every hundred did not finish a seven-year school, there is every reason to say that the young people constitute the principal reserve of the working class.

What is your nationality? Almost two-thirds of the workers and employees live in the RSFSR. But the share of the Russian working class is decreasing. During the Seven-Year Plan the fastest growth, over 1.5 times, was registered by the multinational working class of Kazakhstan. With the exception of Georgia and Moldavia, the working class in the other Soviet republics comprises more than 50 per cent of the population. A large number of Russians, Ukrainians, Latvians and Tatars live and work in other republics. The formation of national contingents of the working class is an important issue and its solution is facilitated by the fact that in the current five-year plan period the industries in Kazakhstan, Lithuania, Latvia, Estonia, Uzbekistan, Turk-

menia and other republics are developing at an especially rapid pace. Bashkiria is a case in point. Prior to the Revolution honey and bast were the main items of Bashkirian export. "The Bashkir is bound to perish," wrote the famous Russian writer Gleb Uspensky a century ago. And when people spoke of "Bashkirian gold", they meant ... bast fibre. In the middle of the sixties, the Bashkirian working class produced 20 per cent of the country's total oil output. The republic produces polyethylene, polyvinylchloride and synthetic rubber. But its principal "product" is its national personnel. No one is any longer surprised by the life of, say, Gumer Telyashev, a village lad who began to work at an oil refinery in 1952. Within a few years he became the head of the republic's first communist labour team. Today Telyashev is Hero of Socialist Labour. Having completed a correspondence course at an institute he became an engineer and on the eve of the 50th anniversary of the October Revolution he completed a postgraduate course.

Your education? Striking changes took place in this sphere during the Seven-Year Plan period. In 1959, out of every 1,000 workers 614, including 549 in industry, did not have a seven-year education. Most of them belonged to the older generation. In the last years millions of workers with school-leaving certificates got jobs at industrial enterprises. In 1965, just over 40 per cent of industrial workers did not have a seven-year education. On the whole, 50 per cent of the workers have either a higher or secondary (complete or incomplete) education. The average educational level of the Kirov plant workers is eight years. At the Kharkov Tractor Plant and the Lvov Bus Factory in 1965, one out of every ten young workers studied at an institution of higher learning after working hours.

Educated workers are the main reserve in the training of engineers and technicians. In 1928, there was on an average four engineers and technicians, of whom only one had a higher education per 100 industrial workers; in 1940, there were ten engineers and technicians of whom three were diploma'd engineers and in 1965, there were about 14 engineers and technicians, including eight with a higher education per 100 workers. In the radio electronics industry the number of engineers and technicians (including research-

ers) and the number of workers are approximately equal. Sociologists have estimated that one out of every six young workers becomes a technician or engineer. Let us take a look at the changes which have taken place at a Moscow factory producing thermal automatic equipment. After reconstruction what was once a factory manufacturing primitive heat exchangers and bulky gas protection items became a modern enterprise manufacturing automatic devices and electronic instruments. In the seven-year period its production increased fourfold, and some of the workers who studied were promoted. For example, milling-machine operator V. Goncharov became shop superintendent, final check inspector V. Chanov was made deputy chief technologist, vertical lathe operator A. Shmelev became superintendent of the mechanical assembly shop, and apprentice plumber Y. Protasov was put in charge of the planning section.

Your occupation? There are over 5,000. In the course of the seven-year period many workers changed their occupations. The number of diggers, track-layers, blacksmiths, cutters, drifters, coal hewers and loaders, and other workers engaged in heavy manual labour declined. At the same time there was an increase in the number of workers trained in new professions requiring a high education level, a long training period and ability to handle modern machines and equipment. They included machine operators, adjusters, welders, electricians, laboratory assistants, drivers and others. The CPSU Programme envisages the complete elimination of manual loading and unloading jobs and strenuous labour in both the basic and auxiliary operations.

Many industrial occupations now require no less training than that of a technician or accountant. Take, for example, an automatic line adjuster, an operator of a modern steel-smelting furnace, an electrician on duty at the control panel, or operators of powerful excavators, dredges and dredge pumps—they must have a technical education, their physical effort is not greater than that of a laboratory assistant, and in some matters their knowledge should equal that of an engineer's. This is yet further proof that the distinctions between the working class and the technical intelligentsia, are being eliminated.

In the deflection system shop of the Krasnoyarsk TV Factory 80 women made the deflecting coils on primitive, low-efficiency machines. The factory's department of automation and mechanisation of production processes designed six automatic winding machines requiring the attendance of eight workers, four a shift. The other 72 women were transferred to other jobs. Those who remained in the shop had to have a good knowledge of the new machines. Their job became more complicated and their average skill increased almost twofold.

At industrial enterprises where mechanisation has not yet become all-embracing there are besides highly skilled repair and maintenance workers a considerable number of unskilled worker-operators whose skill is judged primarily by their ability rapidly and faultlessly to perform a single operation. Adjusters comprised 3.4 per cent and maintenance personnel 7.4 per cent of the total number of workers employed at Sverdlovsk engineering factories. At the same time even the machine-tool operators spent 37.9 per cent of the working time on the machine and machine-manual setting, removing and measuring the items. While the average grade of the adjusters was over four, that of the machine operators was under 1.7. The gap between the qualification level of the various groups of workers was very considerable and so was the difference in their wages.

Comprehensive mechanisation and automation poses the question of the meaning of "qualification" in a new light. The percentage of adjusters at the currently operating enterprises with automatic equipment is 29.6 or almost nine times higher than at ordinary enterprises. The proportion of the maintenance personnel has doubled and amounts to 13.8 per cent. The number of auxiliary workers had declined by 80 per cent and the number of machine operators has also dropped (from 80.6 to 55 per cent). At the same time a worker at the automatic line spends 90.9 per cent of his working time on watching the machine and on its technical servicing, that is, primarily on mental work. Manual operations, involving chiefly physical labour, take up only 9.1 per cent of the shift.

It follows, that the dialectics of development lead from the versatile manual worker to the specialised worker per-

forming a single operation, and then back to the versatile worker but of a new type who is primarily engaged in mental labour and for whom the main thing is not speed methods but a thorough knowledge of the general principles of production, technical skill and the ability rapidly to master the production of new items, materials, machines and technology. For example, a fifth-grade adjuster must tune various machine tools, automatic control machines and conveyors, take part in routine repairs of the equipment and know the technical maintenance rules. It is essential, therefore, that he should have a knowledge of electric engineering, hydraulics and electronics.

Your wages? In industry the average monthly wage is 100 rubles. In the seven-year period the increase was considerable. Moreover, the working week in this period was shortened by 7.2 hours which was tantamount to an additional two month's paid holiday.

The remuneration of workers is based, among other things, on the conditions of labour. As a result, the wage of the building workers which in 1960 was lower than that of the industrial workers, topped it by five per cent in 1966.

In the period from 1959 to 1964, wages increased at a rather slow rate due to the non-fulfilment of labour productivity plans, the lag in agriculture and the need to augment the outlays on defence. But between 1965 and 1967, wages increased as much as they had done in the preceding six years. That was not the limit, however, for now a considerable part of the earnings was paid out of the material incentives fund. For example, the textile workers in Orekhovo-Zuyevo, having successfully fulfilled the plan already in the first year following the introduction of the new system received a premium of 20 kopecks per ruble of their basic wage. There is no longer a limit on premiums: the higher the production results the bigger the premium.

The differences in wages are also decreasing. In 1960, the lowest wage in industry was 45 rubles a month, while in 1968 it was raised to 60 rubles. The gap between the lowest and the average wage which in 1958 was 1:2.9 and 1:2.4 in 1965 is continuing to narrow. The narrowing of the gap between wages must be proportionate to the decreas-

ing difference in the work itself, otherwise there will be a levelling of wages.

Your family budget? In 1966, an industrial worker earned on average 1,252 rubles in 12 months. The annual aggregate sum of pensions, stipends, grants, temporary disablement allowances and benefits paid out of public consumption funds (free medical treatment, education, and so forth) amounted to 477 rubles per person. Taking into account that, as a rule, more than one member of a family worked, the total average monthly income per worker and employee amounted to 214 rubles in 1966.

Between 1959 and 1964, the real income per capita, that is, the aggregate of material benefits granted to the population in terms of one person increased on an average of 3.2 per cent a year, and between 1965 and 1967, by 6.5 per cent, or twice as fast. The annual commodity turnover in the period from 1961 to 1964 increased on average by 4.2 per cent and from 1965 to 1967, by almost nine per cent.

The consumption of meat in workers' families between 1958 and 1964 rose by 9.7 kilos, fish—1.9 kilos, milk products—34.9 kilos, sugar—2.2 kilos, eggs by 12 a year. The consumption of butter and fats remained at the same level.

Approximately as much housing was built between 1959 and 1965 as in the period from 1917 to 1958. An estimated 45 per cent of the Muscovites had their housing conditions improved. There was a marked rise in the standard of amenities. Out of 100 Muscovites 73 have a bathroom, 88 steam heating, 95 running water. For comparison's sake it is worth noting that in Paris in 1960, the corresponding figures were 17, 25 and 59.

Needless to say these changes occurred not only in the lives of the inhabitants of major industrial centres, but also in the life of the working class as a whole. The differences in the living standard in major centres and small and medium towns, however, were not fully removed in the seven-year period. In Leningrad Region (not counting Leningrad proper), for example, the proportion of workers' families with a monthly income of over 75 rubles per person increased in the period from 1958 to 1964 from 7.7 to 20.3 per cent, but was still 50 per cent lower than in Leningrad.

Though the proportion of families with a monthly income of 50 rubles per person dropped from 37.6 to 25.8 per cent it was still four times as high as in the regional centre. In many respects these differences were due to the fact that in the small and medium towns of the USSR 30 per cent of the able-bodied population or twice as much as in the country as a whole were not engaged in social production.

The growth of the workers' welfare is largely connected with improvements in their working conditions. Expenditures on labour protection under agreements annually concluded between the factory administration and the trade unions increased by 30 per cent in 1963-64 alone. The number of accidents in industry, building and transport dropped by almost 40 per cent between 1958 and 1964.

The shortening of the working week to 40 hours and of the working day for workers performing arduous jobs and for juveniles, and also the introduction of a shorter working day preceding days off and holidays and the increase in the number of non-working days (March 8 and May 9) in effect gave each worker an additional two months' holiday.

The introduction of a five-day working week does not imply a direct shortening of the working day but it does enable the people to make better use of their free time. Sociologists have estimated that the time involved in travelling to and from work, the changing shifts and changing of clothes before and after work is cut by 17 per cent, or 70-80 hours a year, which is equal to an additional eight-ten-day holiday. Moreover, the concentration of non-working days lessens the time taken up by domestic chores by ten per cent.

As a result of the transition to a five-day working week the majority of Soviet workers have 110 non-working days a year which gives them additional opportunities to promote their all-round development.

Such were the very important changes that took place in the size and composition of the Soviet working class in the course of the Seven-Year Plan (1959-65) when the Soviet Union made the first step towards the creation of the material and technical basis of communist society.

Targets of the Eighth
Five-Year Plan

The Eighth Five-Year Plan covering the period from 1966-70 witnessed fresh successes of the Soviet working class which continued to advance along the road of building a classless society. This plan was conceived as a qualitatively new stage in economic development. The experience accumulated over the past years, especially in the first half of the sixties, put the problem of the intensification of production at the top of the priority list. Practice showed that apart from modifying the forms of industrial management it was also necessary to improve the long-existing system of planning and material stimulation of the working people. These changes were all the more urgent in view of the gigantic proportions of industrial production which increased 55-fold from the year the First Five-Year Plan was launched. The following figures illustrating the growth in the output of key heavy industry items show the starting positions on the basis of which the Eighth Five-Year Plan was drawn up:

	1928	1940	1945	1965
Electric power (1,000 mln kwh)	5.0	48.3	43.3	507
Steel (mln tons)	4.3	18.3	12.3	91
Oil (mln tons)	11.6	31.1	19.4	243
Gas (1,000 mln m ³)	0.3	3.4	3.4	129
Coal (mln tons)	35.5	166.0	149.0	578
Metal-cutting lathes (thousand)	2.0	58.4	38.4	185
Motor vehicles (thousand)	0.8	145.0	75.0	616
Tractors (thousand)	1.3	31.6	7.7	355
Mineral fertilisers (in conventional units, mln tons)	0.14	3.2	1.1	31.3

Directly connected with the scientific and technological revolution in the USSR, the great upsurge in industry in the sixties largely determined the nature and the direction of the changes which had to be introduced into methods of administration and planning and into the general system of material stimulation and price formation which in the main took shape in industry as far back as in the pre-war period.

The Eighth Five-Year Plan was designed to further develop the material and technical basis of communism and enhance the country's economic and defence capacity. The principal accent in the economic policy was shifted to improving management methods. This meant that the social product and the national income were to grow not so much through increasing investments and commissioning of new capacities, but as a result of more effective utilisation of the national wealth created in the preceding years. More funds were to be channelled into the production of consumer goods.

The plan was based on raising the effectivity of the industries producing the means of production and speeding up the development of agriculture—the crucial raw materials base of the light and food industries. In five years industrial output was to increase by approximately 50 per cent and the total investments in the economy were set at about 310,000 million rubles. Investments were distributed in such a way as to bring closer the rate of agricultural development to industrial growth, the rate of growth of consumer items to the rate of growth of the production of the means of production. Priority was to be given to the development of power, engineering, chemical and metallurgical industries.

The plan provided for a faster growth of labour productivity through technical progress, improvement of the organisation and conditions of labour, economic stimulation of production and material incentives.

Each figure set down in the plan was directly connected with the efforts to strengthen the industrial might of the USSR, improve working conditions, raise the standard of living. The fulfilment of the tasks was directly contingent on the effectuation of the economic reform.

The last year of the Seven-Year Plan and the beginning of the Eighth Five-Year Plan were characterised by the discussion of a new system of planning and economic stimulation in industry and its practical introduction. In the course of the discussion of the directives for the Five-Year Economic Development Plan of the USSR for 1966-70, the working people put forth numerous proposals concerning the utilisation of opportunities offered by the reform. This, too, attested to the correctness of the Party's policy which

reflected the vital interests of the masses. In those years the undertakings assumed by the foremost participants in the socialist competition invariably included pledges to promote the efficiency of production, improve its quality and raise their knowledge of economic management methods. As always, communist labour collectives and shock-workers were in the vanguard of those taking part in socialist competition. The achievements of the front-rankers showed that the plan's targets were fully realistic and the reform created favourable conditions for giving the competition a stable economic foundation.

Economic councils, which were established in 1957 in all major economic areas of the USSR for the purpose of managing industrial production, were dissolved in January 1966. The management of industry and building passed into the hands of corresponding ministries. Gradually, all industrial enterprises, offices and departments went over to the new system of planning and material stimulation of production. The first to do so were the most experienced workers' collectives with a distinguished record of production, including the Krasny Oktyabr Metallurgical Plant in Volgograd, the Norilsk Mining and Metallurgical Combine, the Voskresensk Chemical Works, the Nevsky Machine-Building Works, the Krasnodar Meat-Packing Plant. A programme of lectures on the economic reform and training courses were organised at all of them.

Planning and other departments verified the orders for 1966, thoroughly analysed economic and financial activity over the past several years and on the basis of comparative data brought to light and corrected the shortcomings in the 1966 production plan.

Let us examine how, for example, the Krasny Oktyabr Plant in Volgograd, the Rostov Farm-Machinery Works or the Moscow food factory operated in the new conditions. Now the principal indicators of their activity were the volume of the sold output and profits and efficiency and not the gross output which, whether it was sold or not was wholly regarded as one of the indicators of the fulfilment of the plan. Henceforth, the enterprises were responsible for all stages of production and marketing right up to payment for it and its utilisation in the economic turnover. A greater

responsibility devolved on the enterprises, but at the same time their rights were extended and the more essential commodities they produced, the greater was the share to the profits that was placed at their disposal to be used to expand production, materially stimulate the workers and employees and to pay for housing construction and social and cultural needs. Combining the interests of the state, the enterprise and each worker the reform made it possible to strengthen cost accounting in industry as a whole and within each enterprise in particular. This stimulated the working people to exercise stricter economy, improve the quality of the output and make more effective use of the productive assets (the introduction of payment for the assets increased the responsibility for their rational purchase and utilisation and resulted in the sales of surplus equipment).

These factors drew more workers and employees into daily management of production and played an important role in providing socialist emulation with an economic basis. It was only natural, therefore, that the pledges to raise the effectiveness of production came to occupy a central place in the undertakings assumed by front-rank workers' collectives in the socialist emulation.

A public survey of production reserves in some cases disclosed that figuratively speaking they were there for the taking. For example, even prior to the reform the administration of the Ryazan Chemical Fibre Factory knew that water was very expensive and that it had to be used rationally. But no one thought that this would bring about a considerable economy in funds. A team of workers headed by the Communist, P. Fyodorov, proved that rational use of water would reduce production costs by 336,000 rubles annually. At the Chelyabinsk Road-Building Machinery Factory about 2,500 people took part in ascertaining production reserves and submitted 2,320 proposals of which more than 1,500 were put into effect. At the Nevsky Machine-Building Works engineers and workers submitted 344 proposals. The enterprises took steps to sell surplus equipment, materials and other assets.

The discovery of internal reserves enabled the enterprises to advance counter plans. The Moscow Thermal Automatic Equipment Factory increased the planned volume of output

by 400,000 rubles and obtained 236,000 rubles in additional profit. The First Moscow and the Uglich clock and watch factories, the Voskresensk Chemical Works and other enterprises assumed additional undertakings towards the plan. They intended to fulfil them by raising labour productivity, improving the quality of the output, lowering material and financial outlays and manufacturing more products which were on greater demand than others.

Prior to the reform some industrial executives tried to obtain lower planned targets than those which they could attain, and by surpassing them be entitled to a bonus. Now the enterprises received higher material encouragement for fulfilling those high indices which were written down in the plan, and for each per cent in excess of the plan the deductions into the fund of the enterprise were 30 per cent less than the fixed level. Therefore, it was necessary to work out the optimal plan which took into account all the reserves of production.

According to statistics, the working year in the USSR in 1950 lasted 2,210 hours and 1,865 hours in 1965. The difference was due to a reduction of the working day which made up 77 per cent of the time in question. The number of non-working days and holidays increased by eight per cent, annual paid holidays increased by 17 per cent and the number of hours which workers and employees stayed away from their work due to illness or childbirth increased by 13 per cent. In view of all this each working hour had to be used with the utmost efficiency.

How is the working time distributed? Workers at enterprises in Novosibirsk and Krasnoyarsk drew up a detailed schedule of their working time. In co-operation with the engineers the workers at the Krasnoyarsk Shipbuilding Works began to draw up plans of mobilising reserves at each working place. These plans were worked out by the workers themselves. The worker decided for himself how many minutes in a shift he would be able to economise if one or another of his proposals was put into effect.

Later, in conjunction with scientists a "personal working-time balance" was elaborated at the works. It did not require long entries, and the most frequently occurring delays in the work were grouped according to specific characteristics

and their causes printed on a card. It took a worker not more than three or four minutes to make the entries. Calculations revealed that the proposals written down in the personal balances tended to increase useful working time of the works' innovators by 15-20 per cent.

Addressing the Twenty-Third CPSU Congress, Rusakov, a Leningrad worker, said: "Our entire mode of life indicates that the time has come to concentrate the maximum attention on the quality of production. . . . We know that only the bookkeeper's offices keep account of the rejects. But that is not enough. Let the workers themselves keep track of every reject and come down on all those who do not respect their workers' honour."

Thousands of other examples showed that the economic reform immediately became a vital cause of the working class. Workers discussed it in newspaper articles, at Party and trade union meetings and production conferences. And everywhere they spoke not only of the new methods of planning, price formation and material incentives, but also of perfecting the relations between people in the process of production. This was borne out by the fact that more and more workers turned to team organisation of labour, to collective piece-rate remuneration.

Different people, both as regards their physical strength, skill and attitude to work, make up a team. In most teams the wages are distributed according to a worker's grade and working time. But the grade takes into account only a person's skill and not his attitude to work. At the Kuzbass Elektromotor Factory in Kemerovo account is taken to what has been called the "coefficient of participation". This means that the team assess the monthly performance of each member and either increases or diminishes his share of the earnings. A. I. Malyshev's team at the Novosibirsk metallurgical factory used a different method. Metalcutting consists of several operations and each member of the team went through the entire process spending a number of days on each operation to acquire the necessary work habits, and thus be able to replace his comrade, including the team leader himself. In the long run each member of the team selected the operation which best suited his character and temperament. But all of them are always ready to come to the as-

sistance of each other and each puts his heart into his work knowing that the others are doing the same. Compared with other teams Malyshev's team produces a ton of additional metal every hour: 2,500 tons a year which brings them an extra 15 to 20 rubles a month. Work and the earnings are justly divided. Moreover, in the process of work people welded together to form a tight-knit collective whose interests coincided with interests of their shop, the factory and society as a whole. Therein lies the true essence of the reform.

The workers themselves are very much in favour of a rational combination of the principles of material and moral incentive.

A special machine tool was installed in the tube rolling shop at the Krasny Vyborzhets Plant. The machine tool worked at only a third of its capacity. The workers grumbled that state money was being wasted and decided to adjust the automatic machine themselves. Among them was the plant's best turner Alexander Pulin. He took charge of the new machine tool and many good things were said about him. Time passed, the work quotas were revised, but blanks and instruments were in short supply and earnings declined perceptibly. Pulin spoke to the foreman several times and then resigned from the plant. G. Dubinin, one of the plant's foremost markers, took the matter up in an article published in the *Pravda*: "Everybody needs money. Some spend it to improve their living conditions, to make their life more interesting in the cultural respect. Others spend money thoughtlessly, and at times even to their own detriment. For others money is an aim in itself and they look upon any work primarily from this point of view. Hence, is it possible to place Pulin among the category of people who are out for money and nothing else? Life is life. A person wants to dress well, to purchase good furniture, attend a premiere at a theatre and buy new books. It is only natural that a worker is pleased to see his photograph on the board of honour. In our society both fame and money are only derivatives of work, the foundation of our system. In our society money is not filthy lucre. It merits every respect for it emits the noble gleam of labour.

"Fame and money, moral and material incentives are two

sides of a single medal—labour. Can a medal have only one side? . . . The same applies to incentives. It is impossible to separate good work from material encouragement. It is a mistake to do so."

And here is what A. Galiulin of the forge and press shop of the Tashkent Tractor Plant wrote: "Why do we have only one form of premium—money? Would it not be a good idea to present a worker with an accommodation voucher at a sanatorium or holiday home, a modern radio set, a camera or a tape recorder? Why should I stand in queue to receive my premium and sign for it? I would like to receive it in the shop in front of the workers. And let it be known why it is being presented to me.

"I hope I am understood correctly: I have been prompted neither by ambition nor vanity. I am a working man, a member of our multimillion working class. I have my worker's honour and pride. What I am capable of doing and all that I have achieved in life cannot be measured solely in terms of money."

Hero of Socialist Labour, G. Tsarik, a turner at the Arsenal Works, had this to say: "In a box holding my Government decorations—the Gold Star, two Orders of Lenin and the Order of the Red Banner of Labour—I keep my first award, a badge for mastering machinery. It is a very dear possession for it reminds me of the exciting period of the First Five-Year Plan, of my youth and active participation in the socialist emulation."

The reform gave fresh impetus to the creative activity of the masses. A particularly important role was played by the socialist competition organised to mark the 50th anniversary of the October Socialist Revolution and the Lenin centenary. The competition produced many new forms of the participation of the broad masses in enhancing the effectivity of production, raising labour productivity and raising the technical level of production and the quality of the output.

At the end of 1965, the workers of a number of industrial enterprises in Moscow and Leningrad proposed to launch a nation-wide drive for economy and thrift in the utilisation of crucial raw and other materials. "More, cheaper and better"—that was the slogan advanced by a team of fitters

at the Kirov Works in Leningrad at the outset of the five-year plan.

The whole country heard about the initiative of the workers of the Severokhod shoe factory in Yaroslavl. The workers undertook to manufacture 100,000 pairs of shoes out of economised materials in the anniversary year of 1967 and they kept their word. The factory's workers continued to search for ways of further improving their work. On the basis of very thorough calculations they undertook to manufacture 1,000,000 pairs of shoes out of economised materials in the course of the five-year period, and did so.

To mark the Lenin centenary industrial enterprises set themselves a task to fulfil the five-year plan by November 7, 1970, fulfil the targets of the first four months of 1970 ahead of schedule and by April 22 attain the level of labour productivity fixed for the end of the five-year plan period. In the course of the anniversary competition industrial and building workers came out with fresh initiatives.

The fitters of the mechanical shop No. 8 at the Kirov Works in Leningrad proposed to inaugurate a competition for the title "Winner of the Competition in Honour of the Lenin Centenary". They undertook to attain the level of labour productivity scheduled for 1972. The builders of the Stroitel Trust decided to speed up the tempo of building work by improving the organisation of labour at construction sites, extensively introducing team plans of the scientific organisation of labour and making fuller use of the available reserves.

To mark the Lenin Centenary the workers and employees of a chemical fibre factory in Ryazan undertook to create a million-ruble Lenin fund in the course of the five-year period. Practising strict economy they saved 1,200,000 rubles in three years.

In Gorky Region a large number of industrial enterprises joined a movement organised by the front-rankers under the motto "Not a single backward worker". This movement manifested the communist attitude to work and the high political consciousness of the workers' cadres.

The workers at the Zaporozhye metallurgical plant resolved to produce more metal by making the most of the achievements of scientific and technological progress. As

a result, they produced 100,000 tons of above-plan steel in the course of the five-year period.

Those who took part in the competition successfully carried out measures designed to promote technological progress, enhance the effectivity of production, improve the utilisation of the fixed assets, increase the output of consumer articles and to economise on metals, materials, fuel and electric power.

The radio and the press daily reported the labour achievements of the Soviet people. In the lead of the socialist competition were the front-rank workers and the innovators of production.

In 1967, the Government awarded decorations to many production collectives for successfully fulfilling the plan. Among the enterprises which received the Order of Lenin was the Petrov Engineering Factory in Volgograd manufacturing machinery for the oil industry. Within a space of 25 years the factory was born three times and once it even perished. At the end of 1941, in bitter cold the unfinished factory started work on military orders. In this first war winter the recently installed equipment had to be dismantled and evacuated from the blazing town into the rear. But five days after the rout of the German troops at Stalingrad the factory's director issued an order on a piece of grey wrapping paper to resume building work. People who lived in dugouts and flimsy barracks built a new factory in a year. It was put in operation in April 1944.

It can be said that the factory was born once again in the Eighth Five-Year Plan period when it was reconstructed and its production capacities augmented by 50 per cent. It was much cheaper to do this than to build an entirely new enterprise.

Many industrial enterprises were reconstructed during the Eighth Five-Year Plan period. The Order of Lenin was awarded to the factory because it was one of the first in the country to master automatic hidden-arc welding of very thick metal and its workers took part in developing modern welding methods. Thanks to the joint efforts of the scientists and the factory's workers, whose proposals produced considerable economy, it was made possible to deliver the mammoth equipment to the construction sites not

in parts but in complete units. This cut the installation costs by 30-35 thousand rubles and reduced the time needed to put them up by six months.

Considerable progress was made in the field of capital construction. The Bratsk Hydroelectric Power Station, then the world's biggest, was put in operation. The power grids of Eastern and Western Siberia were united into a single grid. The giant Central Asia-Centre gas pipeline was put in operation ahead of schedule and the Gazli-Igrim gas pipeline, crossing the country from the south to the north along the 65th meridian, also became operational. The first successful steps were made in the development of oil fields in Tyumen Region and in other parts of the country. The metallurgical industry did not lag behind the development of the country's fuel and power base. The biggest projects included the aluminium factory in Bratsk, the zinc factory in Leninogorsk and the world's biggest wire mill in Yenakiyevo. On December 25, 1967, teams which specially competed for the honour, produced the last tons of steel bringing the total output to 100 million tons, an accomplishment which received wide coverage in the press. Due to the considerable headway in the development of the engineering, chemical and other industries, a large group of enterprises manufacturing farm machinery and other items for agriculture and also consumer goods factories was commissioned in the five-year period. Among them were the butter and lard factory in Irkutsk, a footwear factory in Ussuriisk, knitwear factories in Cherepovets, Cheremkhovo, Ishimbai, Karaganda, Semipalatinsk, Dzhzhkazgan and Birobijan.

All told, 800 large industrial enterprises, most of which were built in the east of the country, were commissioned in 1966 and 1967. The majority of the new consumer goods factories were sited in the heavy industry centres.

In the middle of the Eighth Five-Year Plan period there was a perceptible deterioration in the international situation connected primarily with the Middle East crisis, escalation of the war in Vietnam and the events in Czechoslovakia. The Soviet Union carried through a range of additional measures to strengthen the country's defence potential. This was done in the interests of the entire socialist camp and world peace.

Considerable funds were spent on overcoming the consequences of adverse weather conditions and natural calamities. Further important steps were taken to rectify the damage caused to Tashkent by the 1966 earthquake. Some parts of the country suffered heavily from drought, dry winds and floods. The USSR Supreme Soviet pointed out at its session in 1969 that they affected all branches of the economy, especially agriculture. As a result it was necessary to reduce investments and revise the industrial development plan. While in the preceding period capital investments annually increased by 1.2-1.7 thousand million rubles, the increment in 1969 dropped to 700 million rubles.

In spite of all these difficulties the CPSU Central Committee and the Soviet Government consistently followed the line of promoting the rapid growth of the economy and living standards.

The general creative upsurge of the population made it possible to overcome many of the difficulties which had come to light and to fulfil the most important assignments of the last years of the five-year period. On an average one major industrial enterprise was put in operation every day in the period from 1968 to 1970, including a number of unique projects such as the world's biggest Krasnoyarsk Hydroelectric Power Station, the thermal power stations in Konakovo and Krivoi Rog, the Western Siberia and Karaganda metallurgical giants and the oil fields in Tyumen Region and Western Kazakhstan. In August 1970, the first batch of the Zhiguli cars came off the conveyor at the automobile factory in Togliatti whose construction was started in 1967. A tractor factory was put in operation in Pavlodar. Annual Government reports devoted increasing space to the commissioning of light industry enterprises, including a worsted mill in Chernogorsk, a knitwear factory in Kursk, meat-packing plants in Tashkent and Rubtsovsk, dairies in Omsk, Ufa, Zheleznovodsk, Zaporozhye, Panevezys, shoe factories in Voroshilovgrad and Chernovtsy.

By the end of 1968, tens of thousands of Leningrad industrial workers were fulfilling the assignments scheduled for 1970, the last year of the Eighth Five-Year Plan. Three hundred thousand workers in Moscow and 60,000 in Kiev

had carried out their personal five-year plans ahead of schedule. More than 300 industrial enterprises in Moscow fulfilled the five-year labour productivity plan ahead of time.

For excellent achievements in the socialist competition in honour of the Lenin Centenary the Presidium of the Supreme Soviets and the Councils of Ministers of the USSR and the Union Republics and the All-Union Central Council of Trade Unions awarded Honorary Lenin Anniversary Diplomas to the foremost production collectives of industrial enterprises, organisations, state and collective farms.

Communist *subbotniks* were organised during the preparations for the Lenin Centenary. One took place in 1969 on the occasion of the 50th anniversary of the first *subbotnik*, and an All-Union Communist *subbotnik* was held on April 11, 1970 to mark the centenary of Lenin's birth. On that day, working on economised raw and other materials and electric power, the workers achieved the highest ever level of labour productivity. The splendid results of the *subbotnik* fittingly marked Lenin's birthday who wrote as far back as 1920: "We shall work for years and decades practising *subbotniks*, developing them, spreading them, improving them and converting them into a habit. We shall achieve the victory of communist labour."

Socialist competition is organised not for the purpose of inspiring people to set individual records, but to create a system of mass study, to generalise and popularise advanced experience and scientific achievements. Foremost collectives in some industries surpassed the average and in some cases the maximum figures in the USA. In the metallurgical industry this was done by the steelmakers of Magnitogorsk, Kuznetsk and Zaporozhstal, the rolling-mill operators at Azovstal, Kommunar and Krivoi Rog works whose output exceeded the average national indicator by over two times. The production capacity of Magnitogorsk blast furnaces is 50 per cent greater than at the foremost iron and steel mills in the USA. The per worker output of oil in Tataria is 50 per cent higher than in the United States, and the per worker output at the Krasny Proletary Works in Moscow surpasses the corresponding average indicators in the USA by 25-30 per cent. The highest level of labour productivity has been

registered at timber felling sites of Perm Region and at an artificial fibre factory in Kalinin.

In 1970, over 71 million people took part in the socialist competition and over a half of them joined the movement for communist labour. Competitions were held at industrial enterprises whose winners received special bonuses for the best results in promoting the science-based organisation of labour, mechanisation of arduous and manual jobs, utilisation of production reserves and economical use of raw and other materials, fuel and electric power.

In the course of the Eighth Five-Year Plan gross industrial output increased 50 per cent, the production of the means of production rose by 51 per cent and that of consumer goods by 49 per cent. Power, chemical and petrochemical, engineering, radio electronics and instrument-making industries, that is, branches of production determining technological progress, registered the fastest growth rates. The share of these branches in the total volume of industrial production rose from 28 to 33 per cent thus bringing about important qualitative changes in the structure of production.

Clothes factories increased their output by 80 per cent, knitwear factories by 120 per cent, the production of textiles and leather furnishings increased by 70 per cent, and so forth.

The development of the engineering industry played a decisive role in ensuring general technological progress. In the period from 1966 to 1970, more than 7,000 new types of machines, equipment and apparatuses were designed and put into use. At the same time the production of 5,000 types of outdated machines was stopped. The new products included the unique 800,000 kw power unit with a close-coupled turbine of the same capacity, a range of highly productive cold and hot rolling mills, high speed and supersonic passenger airliners, cross-country lorries and 40-ton tip-up lorries, powerful electric and diesel locomotives and electronic computers.

The oil workers registered splendid achievements surpassing the targets listed in the Directives for the Eighth Five-Year Plan. They produced more than 1,500 million tons of oil or twice the amount of oil produced in the USSR up to 1966. The oil industry overfulfilled the five-year plan for

increasing labour productivity and profit and lowering production costs.

Serious efforts were made to improve the quality of the output with the results that about 2,500 items received the "Mark of Quality" certificate from the state certifying committee showing that they either corresponded to or surpassed the best world standards.

During the Eighth Five-Year Plan period the Soviet working class increased by approximately eight million people. In this period the number of industrial workers increased by 4,153,000 as compared with 4,827,000 in the preceding five-year period and was also lower than the control figures for the period 1966-70. This state of affairs in industry reflected the general processes of the formation of labour resources which were taking place in the economy as a whole. According to the Directives of the Twenty-Third Party Congress, the number of industrial and office workers in 1970 was to have been 91-92 million, actually it was 90.2 million. In the five-year period the number of industrial workers increased by three million. Their growth was the fastest during the first three years and then it gradually slowed down by 1970 when only 16 per cent of the growth of industrial output was obtained through increasing the number of workers and 84 per cent through a rise in the productivity of labour. For the entire five-year period these figures were 27 and 73 per cent.

The number of technicians and engineers and employees in industry registered the fastest growth and as a result their share in the industrial-production personnel rose from 10.5 per cent in 1965 to 12 per cent in 1970.

This was not an unexpected development. The scientific and technological revolution and the economic reform sharply increased the demand for engineering and technical personnel. In 1969, there was one engineer per six workers compared with 26 in 1928. In the power engineering industry, for example, engineers and technicians accounted for 60 per cent of the work required to produce powerful turbines. There was a particularly large share of specialists in the new branches of industry. In 1968, the number of specialists with a higher or specialised secondary education in the power industry was 257 per 1,000 workers, in the oil

industry 213 and in the engineering and metal-working industry 178.

Scientific and technological progress wrought substantial changes in the composition of the workers. The greatest increase was registered among the workers of the chemical, light and engineering industries whose personnel grew by 200,000, almost 500,000 and 1,172,000 respectively. In 1969, an estimated 35.7 per cent of the country's industrial workers were employed at engineering enterprises. There was a large growth in the number of fitters, metal-cutting machine operators, gas and electric welders, laboratory workers, adjusters and electricians and a considerable decrease in manual workers. In view of the growth of mechanisation in mines and also the closure of exhausted mines there was a drop in the number of miners. In the textile industry as a result of the increasing number of automatic looms, the number of weavers declined despite the general increase in the industry's personnel.

From 1965 to 1969, the number of operators of machines and other mechanisms and those supervising the work of automatic installations and devices increased 20 per cent.

Taking into account that by the end of the five-year plan the balance of the labour resources became rather strained, the experiment which was launched at the Shchekino Chemical Plant in 1967 aimed at increasing output through higher labour productivity attracted considerable attention as being fully in keeping with the general line of intensifying production. The plant was allowed to reduce the number of workers receiving fixed wages and employ the economised funds to stimulate the growth of labour productivity. The principal trend was to mechanise labour-intensive operations, to develop and introduce progressive work quotas, train the workers in several occupations and modify the administrative structure. A system of material incentives was worked out and a certain percentage was added to fixed wages and salaries. This was done as a result of the economy derived by lessening the number of workers. The enterprise had a well-organised system of professional and management training. The entire collective of workers was concerned with raising the effectiveness of production, a matter which was discussed at production meetings and economic conferences.

Between 1967 and 1969, over 1,000 people acquired additional or related occupations and over 4,000 raised their qualifications. The Party and trade union organisations saw that the dismissed workers, engineers and technicians and office employees were either instructed in other occupations and were given jobs in other shops of the plant or were placed at newly established industrial enterprises.

In two years labour productivity rose by 87 per cent, and output increased 80 per cent though the number of people employed at the plant dropped by 870. By the end of the five-year period, the experimental stage was completed and 107 enterprises in the country followed the example set by the Shchekino Chemical Plant.

The 1970 census showed that 92.4 per cent of the population in the able-bodied category were engaged in social production or study. Consequently, that left a very small number of the still unemployed people who could be drawn into production. This important source of developing production was in the main exhausted. Hence the special significance which is now attached to promoting the growth of labour productivity and particularly the enhancement of the cultural and technical level of the workers.

In recent years there has been a perceptible growth of the proportion of veteran workers in industry. The share of workers and employees with a service record of over ten years increased steadily: in 1958, they made up 40 per cent and in 1967, 59 per cent of the total. Industrial workers had a fairly high general education level. By the beginning of 1966, an estimated 58.4 per cent of them had either an incomplete secondary, secondary or higher education. The increase in the workers attending general education and technical schools and institutions of higher learning and also the growth in the number of the young workers who had 8-10-year schooling raised the general education standard of the cadres of industrial workers.

There are two more indices showing the growth of the working class, the changes in its composition and the general enhancement of its cultural and technical level and public activity. In 1970, the Soviet Union had over 3,500,000 rationalisers and inventors compared with 5,000 in tsarist Russia. Their technical innovations produced an economy of

over 11,000 million rubles between 1959 and 1965 and 12,500 million rubles between 1966 and 1970, or enough to pay for the construction of 30 giant hydroelectric power stations the size of Bratsk.

Finally, the great gains of the Soviet people in the Eighth Five-Year Plan period can be judged from the following eloquent facts cited by A. N. Kosygin in his report to the Twenty-Fourth CPSU Congress. In the period from 1960 to 1970, that is, in ten years the Soviet Union doubled its national income. To achieve the same result it took the USA 20 years, Britain over 30 years, the FRG nearly 15 years. It took the USA 18 years to double its industrial output, Britain 22 years, the FRG over 11 years and the Soviet Union eight years and six months. Such was the Soviet Union's progress along the road of creating the material and technical basis of communism.

**The Soviet Working Class
in the System of the
State of the
Whole People**

Lenin repeatedly pointed out that the organisational role of the proletariat and its Party was their "leading role". As Soviet society developed this role naturally manifested itself in a manner corresponding to the changing conditions. At the contemporary stage of communist construction the role of the working class, the role of the Communist Party in the life of Soviet society increased considerably. At the same time major changes took place in the position of the working class itself and in the position of the CPSU. The process of the development of the Soviet state into a nation-wide organisation of the working people of socialist society began with the adoption of the 1936 Constitution which granted all Soviet citizens equal political rights. Proletarian democracy grew more and more into a socialist democracy of the people as a whole. This process was completed by the end of the fifties. The dictatorship of the proletariat fulfilled its historic mission and ceased to be indispensable in the USSR from the point of view of the tasks of internal development. As a result of the victory of socialism in the USSR, the Communist Party, which emerged as the party of the working class, became the Party of the entire people. But in its policy and due to the very nature of its ideology it relies first and foremost on

the working class. The CPSU is a Party of the whole people because all sections of Soviet society adhere to the positions of the working class, and the interests of the workers, collective farmers and intellectuals have become basically common to them all in conditions of developed socialism.

Does this mean that the working class has ceased to play a leading role in social development? Of course, not. The CPSU Programme states: "Since the working class is the foremost and best organised force of Soviet society, it plays a leading role in the period of the full-scale construction of communism. The working class will have completed its role of leader of society after communism is built and classes disappear."

Lenin often spoke about those features of the proletariat which the working class, having taken power into its hands, must preserve and develop. The principal features of the working class are the ability to place class interests above departmental, group and personal interests; high self-discipline, self-restraint, persistence and preparedness, to endure sacrifices, determination and ability to correct and test a hundred times and achieve its objective whatever the cost; hatred and contempt for narrow-mindedness and philistinism; absence of the feeling of proprietorship and servility; the ability to "inspire respect for its capacity for work in any working man, any honest person"; the wish to attain the heights of culture, the ability and desire to preserve, safeguard and assimilate the culture accumulated by mankind and to develop it further.

Besides these qualities, the Soviet working class in the process of socialist construction acquired new traits engendered by the changes in the position of the proletariat in the system of social production. Above all they were the new communist attitude to work and the realisation that it was the master of the country, the ruling class.

Speaking at the Twenty-Third CPSU Congress, L. A. Sysoyeva, of the Zvenigorodsky State Farm said: "Now it is our duty to have a knowledge of the economy. When I say 'we', I mean all people without exception—specialists and ordinary workers. One cannot be a thoughtless executor in our day and age. It is necessary to search and to foresee. It is necessary to know. . . ."

"Capitalist propaganda would like to present things as though an ordinary person in our country has only the right to unskilled labour, while we, Communists, run the state. They would like to split our people into the ruling class—the Party—and ordinary executors—the masses. At the state farm where I work, one out of every five workers is a Communist. We are that very same ruling class."

In 1959, the Communist Party had 8.2 million members, in 1965—11.7 million, and by the end of 1970—14.4 million Communists were united in 370,000 primary organisations whose number and size also increased in this period. In 1958, a primary Party organisation at an industrial enterprise embraced on an average 44 Communists, and 85 in 1969; at construction sites the corresponding figures were 30 and 38, at state farms—42 and 73 and at collective farms—16 and 45. Relying on this ramified system of organisation, the Party fulfils its leading role. The membership of all elected Party bodies is regularly renewed with increasing number of rank-and-file workers being elected. In 1970, almost a quarter of a million workers and 180,000 collective farmers, a much bigger number than in the preceding elections, were elected members of Party bureaus and committees.

Indicative is the growth of the Party's ranks. In 1956, one out of every 17 people over 18 years of age was a Communist, in 1966 one out of every 13, and in 1970 approximately one out of every 11. The following figures give an idea of the Party's social composition: out of the three million people accepted to Party membership between 1966 and 1970 nearly 1,600,000, or more than 50 per cent were workers. In the mid-fifties, workers made up the second largest group among the people accepted to probationary membership, but in the early sixties they became the dominating group.

The above figures also demonstrate the Party's growing role in the life of Soviet society and the importance of the activity of the working class as the principal vehicle of communist ideology. In the autumn of 1970, there was an interesting discussion on the pages of the *Pravda* on the subject "The Communist and His Time" which fully reflected these trends. The discussion was started off by an article by A. Tkachev, a steelmaker at the Krasny Oktyabr Plant in

Volgograd. He wrote that the workers came to understand more fully that they were directly participating in solving not only the country's internal problems. Echoing this thought, a roller at the Serp i Molot Works, Hero of Socialist Labour V. I. Dyuzhev, dwelt on the competition between socialism and capitalism. "And so it turns out," he wrote, "that when you stand at the rolling mill, you are actually on the frontline of the class struggle. And your factory and shop concerns are elevated to problems of world importance."

Engineers, scientists, machine operators and teachers unanimously supported the views expressed by workers, members of the Communist Party. A sense of lofty responsibility for their actions, for the role of the Communists in the life of the people permeated every article published in the newspaper. Their authors emphasised that in order to reorganise life and build communism it was necessary to surmount many obstacles. When Dyuzhev said that a real innovator was always prepared to overcome additional difficulties and was not afraid of extra worries, a *Pravda* correspondent asked: "Does that mean that the most important thing is one's attitude to work?" Dyuzhev's reply was straight to the point: "Not only to work, but to live, too. We, Communists, must assume greater responsibility." His words characterise the activity of the Communist Party at the new stage of communist construction. The scope of this construction is becoming increasingly grandiose; more and more people are becoming involved in public activity and the tasks which arise in conditions of the scientific and technological revolution are becoming ever more complex. This means that the work of the Communist Party is becoming more complex, too, but the Communists, as Dyuzhev said, are taking more upon themselves and are increasing their efforts thus ensuring the success of the common cause.

Alexander Khalpin, a fitter at the Metallobytrement Factory in Volgograd, would stay behind after work and visit one or another shop jotting something down in his notebook.

"What's on your mind?" his comrades asked.

"I've got an idea. Tell you about it in good time."

One day the Executive Committee of the Volgograd Re-

gional Soviet received a letter from Khalpin in which he wrote that he had worked at the factory for a long time and had certain ideas which he would like to discuss. It is common knowledge, he went on, that the local industry was sometimes unable to meet the constantly growing demand for consumer goods. At the same time it was possible to double the factory's output of garden implements, electric lamps and furniture which were always in demand. There was no need to seek for additional Government subsidies, but only to obtain a bank credit which would be repaid on time, for the factory's income would rise by almost 250,000 rubles annually.

Khalpin's calculations enabled the factory to draw up a long-term development and technical re-equipment plan. In the summer of 1966, the Executive Committee discussed the plan and the chairman opening the meeting said:

"Thank you very much, Comrade Khalpin. You have helped us tremendously."

For his initiative and valuable recommendations, the Executive Committee commended A. Khalpin.

Naturally, he did not consider himself the sole author of the plan, for his proposals were studied by a specially appointed commission of engineers. At the same time it will not be easy to put the plan through and taking that into account the Executive Committee instituted special control over the reconstruction of the local industry enterprises. The main thing, however, was that a worker, and one employed at a small factory at that, found a way of benefiting the state.

The economic reforms drew workers' collectives into the administration of enterprises to a still greater degree.

New forms of the workers' participation in management gradually appeared. In July 1959, for example, special commissions were established by Party organisations to control the functions of the administration. They control the work of economic executives in specified sectors and in contrast to other commissions are not of a temporary but of a standing character. Over 50 per cent of their members are workers, team leaders and foremen. The chief of the section which is subject to control cannot be the head of the commission. The commissions report their findings to the Party

meeting or the Party Committee which elected them and their recommendations are submitted to the administration which has to put them into effect. In keeping with a decision passed by the CC CPSU commissions were also formed to control building work and the commissioning of production capacities.

The Komsomol members and other young people also take part in the administration of production. They look for the still untapped reserves of production and supervise the fulfilment of particularly important orders.

But it is the trade unions that are the biggest mass organisation in the country. The Fourteenth Congress of Trade Unions was attended by 4,561 delegates representing 86,000,000 members. More than 90 per cent of the primary organisations do not have salaried workers. About 1,500,000 activists are members of social insurance commissions controlling the huge social insurance budget. Several thousand trade union members prepare the necessary documents for people retiring on pension, find jobs for invalids, participate in the work of public councils at medical institutions and supervise the work of shops and public services. Grades, work quotas and the system of wages cannot be fixed, grants and pensions and housing cannot be allotted and workers cannot be discharged without the consent of the trade union. A factory committee controls the observance of labour legislation, the collective agreement, timely introduction of rationalisation proposals, takes up the question of dismissing top administrative personnel or criticising their work, organises socialist emulation, guides the proceedings at production meetings, hears the reports of heads of industrial enterprises concerning the fulfilment of the plans and the terms of the collective agreements. A factory committee is empowered to pass decisions binding on the administration concerning the compensation of expenses connected with the payment of grants for people involved in accidents at work and those suffering from occupational diseases for which the administration is to blame and the settlement of labour disputes. The trade unions in capitalist states do not have such extensive rights.

An important form of drawing the working people into production management are the standing production con-

ferences which support all progressive innovations and orientate the creative initiative of the masses towards the solution of key production problems. They are also instrumental in fostering a communist attitude to work and to public property. Enterprises where standing production conferences function effectively have practically no trouble in solving problems connected with the improvement of production.

The CPSU regards the further development of Soviet democracy as its most important task. The participation of the workers in the Soviets increased markedly in the course of the Eighth Five-Year Plan period as did their number among the deputies to the Soviets. In 1959, workers held approximately 19 per cent of the seats in the local Soviets. A decade later they occupied 35 per cent of the seats. The share of the workers in the City Soviets and the Supreme Soviets of the republics was even bigger. In 1967, elections to the Soviets were held in all the republics. In the Supreme Soviets of the RSFSR and Estonia one out of every three deputies was a worker. In the Supreme Soviet of the Kazakh Soviet Socialist Republic 46 per cent of the deputies were workers. Three of the five deputies from Bryansk Region were workers, and so forth. Needless to say, all the other deputies—collective farmers, engineers, economic executives, scientists, Party members and Soviet servicemen are closely connected with the working class and adhere to a policy which expresses its vital interests and consequently of the people as a whole.

The same year parliamentary elections were also held in France, one of the most democratic of the bourgeois countries. But that year her parliament had only 30 workers, with only one worker belonging to the ruling Party. The rest were on the list of candidates drawn up by the Communist Party.

Let us take a look at the list of deputies elected in 1966 to the Supreme Soviet of the USSR drawn up according to the election districts. Who, for example, were Lithuania's deputies in the Soviet of Nationalities? First come representatives of Vilnius, the capital of Lithuania: N. K. Makarova, born 1930, an adjuster at an electric meter factory, non-Party; K. J. Mackievičius, born 1932, Secretary of the City Party

Committee; E. D. Puzelevičius, born 1931, a fitter at a machine-tool factory, non-Party. Could a worker in the old bourgeois Lithuania have ever dreamed of becoming a member of parliament? Edvardas Puzelevičius was 15 when the Second World War ended. He studied at a vocational school and in 1950 became a factory worker. But the important thing was how he worked. Thanks to his knowledge and experience he became a member of the Planning and Budgetary Committee of the Soviet of Nationalities of the Supreme Soviet of the USSR.

One of the deputies to the Supreme Soviet of the RSFSR is Larisa Boldova. She works at the Parizhskaya Kommuna Shoe Factory.

She is a communist labour shock-worker and a member of the Komsomol Committee. Larisa Boldova shares the joys and sorrows of her workmates and takes an active part in the life of the workers' collective. Perhaps that was why her comrades nominated her as their candidate to the Supreme Soviet of the RSFSR.

A third of the seats in the Supreme Soviet of the USSR elected in 1970 were held by workers, the most representative group in the Soviet parliament whose members represent 62 nationalities and more than 50 per cent of whom were elected to the Supreme Soviet for the first time. It should be stressed again that the other deputies, those who are not workers, are inseparably bound up with the working class.

Here are a few lines from the biographies of two people. One of them is Chairman of the Soviet of Nationalities Yadgar Nasriddinova. She was born into the family of an Uzbek worker. Becoming an engineer she was a work superintendent at the construction of the Ferghana Canal. Later she became a Komsomol and then a Party worker, a minister and then Chairman of the Supreme Soviet of the Uzbek Republic. Yadgar Nasriddinova succeeded J. I. Paleckis as Chairman of the Soviet of Nationalities of the Supreme Soviet of the USSR. Paleckis was Lithuania's deputy at all the Supreme Soviets of the USSR. A former worker, he covered a long and difficult road before he became a statesman. He began as a worker at a printing shop in 1915 and then became a carpenter. He studied, got a

job as a schoolmaster and subsequently became a journalist. In 1933, Paleckis visited the USSR. Returning to Lithuania he became active in the anti-fascist movement and was arrested and placed in a concentration camp. In 1940, after the overthrow of the bourgeois dictatorship he became the head of the popular government in Lithuania. From the day Lithuania joined the USSR until 1966 he was the Chairman of the Supreme Soviet of the Lithuanian Soviet Socialist Republic.

Thus, the Communist Party, the Soviets, trade unions, the Komsomol and other mass organisations are the main elements of the political system of socialism. Each element occupies its specific place and performs its specific functions. Taken together, at all stages of the development of Soviet society from the first steps of the dictatorship of the proletariat in 1917 to the contemporary stage of communist construction connected with the consolidation of the state of the whole people, these elements expressed the fundamental interests of the working class as they do today, too, for they were brought to life by the working class itself, by its struggle for the construction of a classless society.

Marx wrote in his time: "The thorough the historical action, the greater the volume of the mass whose cause it is." Developing this idea Lenin arrived at the practical conclusion that the deeper the change which we want to carry through, the higher we should raise the interest and conscious attitude to it and to convince ever new millions and tens of millions of this necessity. In 1917, the proletariat of Russia numbered about 20 million, while the Communist Party had less than 250,000 members. When the full-scale construction of communism was launched workers made up more than 50 per cent of the country's adult population and one out of every ten was a Communist.

The Twenty-Fourth Congress of the Communist Party of the Soviet Union which sat in Moscow from March 30 to April 9, 1971 brought together about 5,000 delegates from the local organisations of the Party numbering 14,500,000 Communists. The working class delegated 1,195 workers in various branches of industry, building and transport to the Congress, the largest number of workers ever to attend a Party Congress.

The Twenty-Fourth Congress was fresh proof of the fact that the Communist Party of the Soviet Union honorably and wisely fulfils its mission of leader of the working class and all working people and is leading the Soviet people along the correct road, along the course charted by Lenin. Fully realising this, the Soviet people have the complete trust in the Leninist Party and its policy. The Party Congress, naturally, was an event of nationwide importance. During the preparations for and during the Congress, the attention of all Soviet people was focussed on this Party forum which they marked with fresh labour accomplishments.

A great milestone in the life of the Soviet people, the Twenty-Fourth Congress has gone down in modern history as an event of immense international significance due to the tremendous role played by the Soviet Union and its Leninist Party in the historical destiny of mankind, the liberation movement of the exploited and oppressed peoples and in the struggle against imperialism, for peace, progress and

socialism. A hundred and two delegations from Communist, Workers', national-democratic and Left Socialist Parties from 91 countries were present at the Congress. It was the most representative forum in the history of the communist movement. Addressing the Congress, the foreign guests spoke very highly of the domestic and foreign policy of the CPSU, its principled Marxist-Leninist line in the world communist movement, its consistent efforts to strengthen the unity in this movement, to rally all the revolutionary forces. They unanimously underlined the great international significance of the Twenty-Fourth Congress and were confident that it would have a beneficial impact on the world communist and the entire progressive movement of the contemporary period. The proceedings at the Congress evoked a broad response from the world public.

The Congress discussed the report of the Central Committee delivered by General Secretary of the CPSU Central Committee L. I. Brezhnev and unanimously approved the theoretical and practical conclusions contained in the report. It approved the Directives for the Five-Year Economic Development Plan of the USSR for 1971-75 contained in the report delivered by Chairman of the USSR Council of Ministers Alexei Kosygin and drew up two documents on the most crucial issues of the current international situation: the address "Freedom and Peace to the Peoples of Indochina!", and the statement "For a Just and Lasting Peace in the Middle East".

On April 9, 1971, the CPSU Central Committee elected by the Twenty-Fourth Congress held a Plenary Meeting which elected L. I. Brezhnev General Secretary of the Party Central Committee. It also elected the Politbureau of the CPSU composed as follows: Members of the Politbureau L. I. Brezhnev, G. I. Voronov, V. V. Grishin, A. P. Kirilenko, A. N. Kosygin, F. D. Kulakov, D. A. Kunayev, K. T. Mazurov, A. Y. Pelshe, N. V. Podgorny, D. S. Polyansky, M. A. Suslov, A. N. Shelepin, P. Y. Shelest, V. V. Shcherbitsky; Alternate Members: Y. V. Andropov, P. N. Demichev, P. M. Masherov, V. P. Mzhavanadze, Sh. R. Rashidov, D. F. Ustinov.

It was noted at the Congress that the Soviet Union's internal development was closely connected with the situa-

tion in the world arena, with the Soviet Union's international relations.

The past years witnessed tremendous changes in international affairs. These changes substantiated the principal fact of contemporary development—the transition of mankind from capitalism to socialism. The balance of forces between socialism and capitalism is steadfastly changing in favour of socialism.

In its internal development the Soviet Union has made tremendous achievements in all spheres of communist construction and now possesses unprecedented opportunities for making further progress.

The 1970 census showed that substantial changes took place in the country in the eleven years that had passed since the 1959 census. In this period the population of the USSR increased from 208,800,000 to 241,700,000, that is by 16 per cent. The increase in the urban population was much greater than that of the rural and as a result the proportion between the urban and rural populations changed from 48:52 to 58:42.

The working class comprised 55 per cent of the employed population and thus became the biggest stratum of Soviet society. But, needless to say, the place occupied by the working class in socialist society is determined not only by its numerical size, which can change depending on economic development and the rate of the scientific and technological progress and other factors. The working class continues to be society's principal productive force in conditions of developed socialism. Its revolutionary spirit, discipline, organisation and collectivism determine its leading position in the system of socialist social relations. Therefore, it is the workers who are the initiators of all the great developments in revolutionary transformations and creative activity. It is they who are the first to produce innovators of production, the initiators of new, more advanced forms of socialist emulation. It is likewise natural that the working class should play the leading role in the country's social and political life. And it is not by accident that the strata of workers in the CPSU membership is growing all the time and so is the number of representatives of the working class in the Soviets and public organisations.

The leading role of the working class enhances with the rise of its general cultural and educational level and its political activity. The last two censuses give a particularly good idea of the growth of the cultural level of the working class. In 1959, there were 386 workers with a complete or incomplete higher or secondary education per 1,000; in 1970, this figure was 550.

A new historical community of people, the Soviet people, took shape as a result of the radical social changes that occurred in the course of socialist construction.

The Twenty-Fourth Congress disclosed the historical conditions and natural causes which engendered the appearance of the new historical community. It emerged in the course of the struggle and labour of the Soviet people for the sake of socialism and communism. "New, harmonious relations, relations of friendship and co-operation, were formed between the classes and social groups, nations and nationalities in joint labour, in the struggle for socialism and in the battles in defence of socialism."

At the same time the Congress gave a profound scientific interpretation of the concept "Soviet people".

The Soviet people is more than just a multinational community: it is above all a social and class community of working people, a community of workers, peasants and intellectuals, consolidated by a uniform social position, common destinies and vital interests and ideals of communism.

Since the working class, the peasantry and the intelligentsia of the Soviet Union represent different nations and nationalities, the Soviet people is at the same time a multinational community of people, a new historical community basically different from those "communities of nations" which came and went in the course of capitalist development. Because of its socialist, internationalistic nature this community possesses insuperable vitality.

Summing up the results of social relations and public and cultural life in the country in the period under review, the Twenty-Fourth Congress noted: "... Important social changes are taking place in the process of communist construction in the conditions created by the unfolding scientific and technological revolution and the deep-going changes in the economics and nature of labour. The level of professional

training and the proficiency of workers and peasants, the level of their education and culture are rising; working and living conditions in town and country are gradually drawing closer; the intelligentsia, especially the scientific and technical intelligentsia, is growing numerically. The unity of Soviet society is growing stronger on the basis of the socialist interests and communist ideals of the working class."

The Congress noted that thanks to the selfless labour of the working class, the collective farmers, the intelligentsia and all working people, a new big step forward has been taken in building the material and technical basis of communism, raising the living standard of the people and augmenting the country's might.

Figures illustrating the country's production capacity give an idea of its economic growth. In 1970 alone, the industrial output was twice the total output of all the pre-war five-year plan periods. At the beginning of the current five-year plan the daily output of the Soviet economy was ten times greater than at the end of the thirties. In one minute the Soviet Union produced more gas than the whole of Russia produced in ten days. Each minute the country produced 1,200 tons of coal, 660 tons of oil, 1,280 pairs of shoes, and so forth.

Thoroughly analysing the state of the economy, the Congress outlined a programme of the country's further economic and cultural development, which was embodied in the Directives of the Twenty-Fourth Congress of the CPSU for the Five-Year Economic Development Plan for 1971-75.

The draft Directives were widely discussed long in advance and they were thoroughly considered at the Congress itself.

The main task of the five-year plan "is to ensure a considerable rise of the people's material and cultural level on the basis of a high rate of development of socialist production, enhancement of its efficiency, scientific and technical progress and acceleration of the growth of labour productivity."

A noteworthy fact is that the task of raising the material and cultural level of the people has been put into the forefront for the first time in the history of the economic development of the USSR. This is a clear sign that Soviet society

has reached a high level of economic development and has become an advanced socialist society. Today the Soviet Union is in a position to solve large-scale tasks in all fields of construction and public life.

The realisation of the grandiose plan of economic development will lead to further important changes in the country's socio-political life. It will help bring the working class, the collective farm peasantry and the intelligentsia closer together, enhance the homogeneity of Soviet society and gradually erase the essential distinctions between town and country and between mental and manual labour. The fulfilment of the Ninth Five-Year Plan will be marked by a further florescence of the Soviet socialist nations and peoples and their drawing together and the strengthening of their fraternal unity.

The new five-year plan is of tremendous international significance. Its fulfilment will be a major contribution to the common cause of strengthening the economic potential of the socialist states and consolidating the positions of the world socialist system in its economic competition with capitalism.

The five-year period through which the Soviet Union is now passing will produce further proof of the advantages of socialism and constitute an important step forward on the road to communism.



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